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National Board of Health

BULLETIN.

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RESULTS OF REGISTRATION IN RHODE ISLAND FROM 1854 TO 1878.

[By C. H. FISHER, M. D.]

The vital statistics of any community for a single year are quite unreliable as furnishing data for definite conclusions. And this is true, more especially, in regard to statistics of mortality. The variations of the death-rate of one year with another, owing to epidemic influences and meteorological conditions, are well known to all sanitarians. But the aggregates and averages of the several kinds of events enumerated under the term of vital statistics, collected with a fair approximation to completeness and accuracy for a long series of years, afford quite reliable data for a great variety of precise comparisons, and the ascertainment of definite relative percentages. In the following tables, summaries, and remarks there will be presented, not only the general and comparative results of a single year, but also of variable periods of years of considerable length.

The latest single year of which full reports have been received from the several towns in Rhode Island was that of 1878, in which the returns showed comparative results, in part, as follows:

To population by census of 1875, one birth to every 38.5 persons, or 26.0 in each 1,000; one person married to every 55.7 persons, or 18.0 in each 1,000; one death to every 58.1 persons, or 17.2 in each 1,000.

For every 100 births, there were about 35 marriages and 66 deaths.

Proportion of the sexes.—In each 100 children born, 50.7 were males and 49.3 were females, or 102.7 males to each 100 females.

The comparative general results of registration for a period of 25 years, 1854 to 1878 inclusive, are as follows:

In every 100 births, there were 3.83 children still-born; in every 100 births, there were 96.17 children living; for every 100 births, there were 81.5 persons married; for every 100 births, there were 65.6 persons deceased.

It has been a question whether the difference in the habits and modes of living in city and country had any influence upon the proportion of the sexes of children born.

The following shows the proportion of the sexes of the children born in Providence, and in the rest of the State, and in the whole State, during the years 1877 and 1878, and also in the twenty-five years from 1854 to 1878, inclusive:

1877.

	Males to each 100 Females.	Males.	Females.
Providence City	104.9, or	51.20 and	48.80 in each 100.
Rest of the State	101.6, or	50.41 and	49.59 in each 100.
Whole State	103.0, or	50.73 and	49.27 in each 100.

1878.

	Males to each 100 Females.	Males.	Females.
Providence City	106.8, or	51.64 and	48.36 in each 100.
Rest of the State	100.2, or	50.06 and	49.94 in each 100.
Whole State	102.7, or	50.70 and	49.30 in each 100.

Twenty-five years, 1854 to 1878, inclusive.

	Males to each 100 Females.	Males.	Females.
Providence City	105.6, or	51.36 and	48.64 in each 100.
Rest of the State	107.2, or	51.74 and	48.26 in each 100.
Whole State	106.5, or	51.60 and	48.40 in each 100.

The foregoing comparisons show that although the proportional number of male births in the city of Providence for the years 1877 and 1878 were considerably in excess of the same in the rest of the State for the same years, it does not hold good for the long period of twenty-five years.

Relation of season to sex.—The following table will present a summary of the quarterly periods, and the proportion of the sexes of the children born during the year 1878:

	Males to each 100 Females.	Males.	Females.
1. January—March	106.6, or	51.50 and	48.50 in each 100.
2. April—June	98.9, or	49.65 and	50.35 in each 100.
3. July—September	103.8, or	50.83 and	49.17 in each 100.
4. October—December	102.0, or	50.50 and	49.50 in each 100.
Year 1878	102.7, or	50.06 and	49.94 in each 100.

Summary of 18 years, previous to 1878.

	Males to each 100 Females.	Males.	Females.
1. January—March	105.7, or	51.39 and	48.61 in each 100 born.
2. April—June	106.8, or	51.65 and	48.35 in each 100 born.
3. July—September	105.0, or	51.22 and	48.78 in each 100 born.
4. October—December	106.5, or	51.58 and	48.42 in each 100 born.
For the whole No. of years	106.0, or	51.46 and	48.54 in each 100 born.

Relation of season to whole number of births.—The following synopsis will show the percentage of the aggregate of births in each quarter, without regard to sex, for twenty-five years:

Quarters.	Per cent.
January—March	23.72
April—June	23.89
July—September	26.15
October—December	26.24

It will be noticed that the numbers gradually increase from the first to the last quarter.

Parentage of children born.—The following table will show the variations of the percentages of parentage in each of the last six years, and also those occurring in three periods of five years each, from 1858 to 1872 inclusive:

Parentage.	1878.	1877.	1876.	1875.	1874.	1873.	5 years. 1868 to 1872.	5 years. 1863 to 1867.	5 years. 1858 to 1862.
American	43.00	42.74	40.84	41.90	41.80	45.08	44.17	45.18	48.50
Foreign	42.82	42.38	45.40	44.65	45.59	43.52	44.72	46.37	44.33
American father and foreign mother	6.35	6.67	5.59	5.98	5.34	4.62	4.89	4.07	3.73
Foreign father and American mother	7.83	8.21	8.17	7.47	7.27	6.18	6.22	4.38	3.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

By the census of 1875 the population, according to parentage, was as follows: American, 52.17 per cent.; foreign, 47.83 per cent.

In order to contrast the percentages of the children born in the different classes, as seen in the preceding table, with the percentages according to the population, for the same number of years, the following table is introduced:

Children with—	1878.	1877.	1876.	1875.	1874.	1873	5 years. 1868 to 1872.	5 years. 1863 to 1867.	5 years. 1858 to 1862.
American fathers	49.89	49.41	46.43	47.88	47.14	50.30	49.06	49.25	52.22
Foreign fathers	50.11	50.59	53.57	52.12	52.86	49.70	50.94	50.75	47.78
American mothers	50.68	50.95	49.01	49.37	49.07	51.86	50.39	49.56	51.95
Foreign mothers	49.32	49.05	50.99	50.63	50.93	48.14	49.61	50.44	48.05

It will be seen that the percentage of children born of American parentage has been almost uniformly less than the proportion of the American to the whole population, and the percentage of children born of foreign parentage has been equally uniform in being larger than the proportion of that class to the whole population.

NUMBER OF THE CHILD OF THE MOTHER.

The proportion of the first, second, third, &c., child of the mother, in the aggregate of twenty-two years, is as follows:

First child, about one in every four births, or 25.0 per cent. Second child, about one in every five births, or 20.0 per cent. Third child, about one in every six births, or 16.6 per cent. Fourth child, about one in every eight births, or 12.5 per cent. Fifth child, about one in every eleven births, or 9.1 per cent. Tenth child, about one in every seventy-seven births, or 1.3 per cent. Fifteenth child, about one in every 1,580 births. Twentieth child, about one in every 36,384 births. Twenty-first child, about one in every 36,385 births. Twenty-second child, about one in every 55,326 births.

PLURALITY BIRTHS.

Of the whole number of *cases* of child-birth in twenty-six years, one in 93.9 produced twins, and one in 6,781 produced triplets.

Of the whole number of *children* born during the same period, according to the statistics, one in every 47 was a twin, and one in every 2,283 was a triplet.

PARENTAGE AND SEX OF PLURALITY BIRTHS.

Of the whole number of cases of plurality births in twenty-six years, there was 42.5 per cent. in which both parents were Americans; 49.0 per cent. in which both parents were foreign; and 8.5 per cent. in which the parentage was mixed or unknown.

Of the whole number of *children born* in plurality cases during the twenty-six years, 50.08 per cent. were males, and 49.92 per cent. were females.

STILL-BORN—SEX.

Of the still-births reported in Rhode Island for a period of twenty-six years, the proportions of the sexes in the aggregates is as follows: For every one hundred still-births, there were 60 males and 40 females; or for every 100 females, there were 150 males.

And it is worthy of note that this proportion has prevailed with great uniformity during each of nearly all of the single years.

PARENTAGE OF STILL-BORN.

For a period of twenty years the proportions are 43.96 of American, and 56.04 of foreign parentage in each 100 still-births; or 127.4 births of still-born children of foreign parentage to each 100 of American.

SEASON OF STILL-BORN.

For a period of twenty-six years the proportions are as follows: 1st quarter, 25.5 per cent.; 2d quarter, 22.9 per cent.; 3d quarter, 26.0 per cent.; 4th quarter, 25.6 per cent.

MARRIAGES.

Season.

The percentages of the marriages in Rhode Island, in each quarter of the year 1878, may be found in the following table, together with the percentage in each quarter for the twenty-five years previous, viz, from 1853 to 1877 inclusive:

Years.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	Whole year.
1878, percentage	22.25	24.52	24.01	29.22	100.00
1853–1877, percentage (25 yrs.)	22.31	24.60	23.60	29.49	100.00

It will be observed that the largest percentage of marriages occurred not only in the last quarter of the year 1878, but also in the percentage of the aggregate of the last quarters for the previous twenty-five years. This rule, which has prevailed so uniformly for so lengthened a term of years, has been variously accounted for. Doubtless the approach of the colder season, and the almost universal disposition to closer companionship during its continuance, aided by the increased social proclivities and warmer manifestations of sentiment and affection during the holiday season, contribute largely to the result.

It will also be observed that the smallest number of marriages in any one of the quarterly divisions of the year has been uniformly in the first quarter during the whole period of registration. Considering the ecclesiastical sentiments of a large proportion of the population in regard to the performance of the ceremony of marriage during the Lenten season, and the largely increased ratio of the previous quarter (one extreme following another), it is not at all remarkable that the percentage is so much smaller for the first quarter.

Nativity of persons married.

The number of marriages among parties of purely foreign birth has almost constantly decreased from year to year for the last decade.

The reason is obvious. The proportional number of adults of strictly foreign birth, among the so-called foreign population, is rapidly decreasing; diminished by lessened immigration and by death. The number of those of foreign birth in the periods of life in which the marriage relation is most frequently assumed is fast diminishing from advancing age. The number of marriages of persons of purely foreign birth must, therefore, under the existing order of events, continue to decrease, while the number of those born of parents of foreign birth, but are of themselves of American birth, and rapidly attaining the marriageable age, are steadily increasing, and must continue to help swell the number of marriages of native citizens.

There has been a gradual increase in the number of mixed marriages, though in a somewhat irregular manner, during the whole period of the registration of the same. It is an evidence that the caste prejudice of nationality is gradually diminishing.

In the following table are given the percentages of American, foreign, and mixed marriages in the last five years, and in the aggregate for the twenty years, 1858 to 1877 inclusive. By *mixed* marriages are meant those where one party was of American and the other of foreign birth:

Birth place.	1878.	1877.	1876.	1875.	1874.	20 yrs. Total.
United States	62.60	61.66	62.23	59.04	58.84	61.33
Foreign countries	21.22	21.73	22.77	24.70	27.35	26.19
Mixed	16.18	16.61	15.00	16.26	13.81	12.48
Total	100.00	100.00	100.00	100.00	100.00	100.00

It will be observed that the percentage of marriages of persons of American birth, in 1878, is not only larger than in the two previous years, but it may also be stated that the percentage, in comparison with all others, is larger than for any year since 1868.

It will be seen, also, that the marriages of persons of foreign birth have gradually decreased in percentage, while the marriages of those of mixed nativity have as gradually increased in percentage.

In comparison with the average of twenty years, the percentage of marriages, in 1878, of persons of strictly American birth is somewhat larger; the percentage of those of mixed nationality is larger by about 30 per cent., while the percentage of marriages of persons of strictly foreign nativity has decreased nearly 20 per cent.

DIVORCES.

The average number of divorces granted, in comparison with the average number of marriages, in each of the ten years 1869 to 1878, inclusive, is as follows: For every thirteen marriages there has been one divorce, or 7.7 divorces to each 100 marriages.

DEATHS.

The rate of mortality for the year 1878 was one to every 58.10 of the population, according to the census of 1875, or at the rate of 17.20 in each thousand.

The percentage and death rate are almost precisely what they were in 1877, but differ more with the smaller number of 1876, when the death rate was one decedent to every 62.7 of the population, or 15.9 in each one thousand.

It may be of interest to contrast the percentage of deaths in the city of Providence with those that occurred in the rest of the State, according to population, for the purpose of showing the difference in the rate of mortality between city life, under favorable circumstances, and life in villages and rural districts.

In order to bring before the eye in a more direct manner the comparisons alluded to, the following synopsis for the years 1876, 1877, and 1878 is presented:

	One death in every—	In each 1,000.
1876.		
Providence City	54.00	18.50
Rest of State	70.00	14.28
Whole State	62.70	15.90
1877.		
Providence City	51.90	19.25
Rest of State	62.70	15.94
Whole State	58.30	17.20
1878.		
Providence City	50.62	19.89
Rest of State	64.26	15.56
Whole State	58.10	17.20

The observation has been frequently made that the difference in mortality between the city and State, shown by the statistics of deaths as reported from the towns, could not be relied upon as entirely correct. It is believed that many of the villages of the State have quite as insalubrious surroundings as any parts of the city of Providence; and, although it is known that in the rural districts, at least, the percentage of children, in whom the mortality is largest, is much smaller than in the city, still, the rate of mortality could scarcely show so much disparity if the whole number of deaths outside of the city were fully reported.

The failure to return the whole number of deaths occurs mainly in those towns having a large manufacturing population, among which frequent removals are almost the rule, rather than exception, and where burial permits are not required. It is very certain that there will never be anything like complete returns of deaths until burial permits are required in every town in the State.

SEX OF DECEDENTS.

Of those persons whose deaths were returned during the year 1878, the ratio stands at 94.78 males to each 100 females, or 48.66 males and 51.34 females in each 100 decedents.

For a period of twenty-six years the proportion of the sexes in the aggregate of the whole number of decedents reported during that time, is as follows:

Males, 49.18 per cent.; females, 50.82 per cent.; or, 96.8 males to each 100 females.

Not only in the aggregate of the twenty-six years, but also in nearly all of the separate years during the whole period of registration, there has been an excess of females among the decedents; and it may be added that an excess of males among the children born has been equally uniform during the same period.

A natural inference would be that the male portion of the population must be largely in excess of the female portion and annually increasing.

But by reference to the census report of 1875 it is found that the females exceeded the males in the population, the proportions being as follows: Males, 48.62 per cent.; females, 51 38 per cent.; or 105.7 females to each 100 males.

There has evidently been a larger proportional emigration of native males from the State or a much larger proportional number of female immigrants.

SEASON AND MORTALITY.

The influence of season upon mortality may be illustrated by the following table, which shows the percentage of deaths in each quarter of each of the last five years, and in the aggregate for the twenty-one years from 1853 to 1873, inclusive.

Season.	1878.	1877.	1876.	1875.	1874.	1853–1873.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
January—March	25.87	21.03	23.03	25.50	23.10	23.12
April—June	21.81	21.53	22.89	21.13	24.71	21.23
July—September	26.46	29.60	30.34	28.82	28.02	30.98
October—December	25.86	27.84	23.74	24.55	24.17	24.67
	100.00	100.00	100.00	100.00	100.00	100.00

In regard to the influences of city life in connection with season, in the production of mortality, a contrast of the rate in the city of Providence may be made with that of the whole State. But it may be observed that a contrast with regard to the habits and modes of life, between the city and rest of the State, would not show such marked differences as might be expected. The great proportional number and proximity of the villages of Rhode Island, with their facilities of access, and the frequent communication of residents therein with each other and with the city of Providence, make the entire population more homogeneous in character than that of any other State. Then, the city of Newport and several villages large enough for incorporation into cities, and a considerable number but little less in size, present all the essential conditions of city life in their sanitary relations, as well as in the customs and modes of living of the inhabitants. Under these circumstances, it would not be expected that there would be any great difference in the percentage of mortality, in the same quarters of the year, between the city of Providence and the State at large.

An examination of the table below will show that the mortality rates of the city and State, in regard to season, do not largely differ, for in a period of twenty-four or more years the average percentage in the same quarters between the city and the whole State does not in any instance reach as high as three-quarters of one per cent.

Of course the exact difference is not shown, because the death statistics of the city are merged in those of the State, but the result is sufficiently conclusive in establishing the fact that, whatever difference there may be, it does not exceed one per cent. in the average of any lengthened period of time.

Season.	1855–1878.	1855–1878.
	Providence.	Whole State.
	Per cent.	*Per cent.*
January—March	23.89	23.28
April—June	21.93	21.53
July—September	29.76	30.37
October—December	24.42	24.82
Total	100.00	100.00

PARENTAGE OF DECEDENTS.

The following table gives the percentage of decedents of American and of foreign parentage in each of last five years, and in the aggregate of twenty years previous to 1878:

Parentage.	1878.	1877.	1876.	1875.	1874.	1858–1877.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
American	51.36	51.21	52.24	57.12	54.10	57.60
Foreign	48.64	48.79	47.76	42.88	45.90	42.40
Total	100.00	100.00	100.00	100.00	100.00	100.00

It will not fail to be noticed upon examination of the above table that the difference in number and percentage between the decedents of American and foreign parentage has been steadily lessening. Previous to 1877 the percentage of decedents of foreign parentage had not *averaged* annually for the period of nineteen years as high as 43.00 per cent. It will now be seen that the foreign percentage has *averaged* more than 46.00 per cent. annually for the last five years, and has nearly reached 49.00 per cent. during the years 1877 and 1878.

AGE OF DECEDENTS.

The average age of all the male decedents reported in 1878 was 29.02 years; and the average age of all the female decedents during the same year was 31.11 years.

For the year 1877, the average age of males was 29.25 years, and of females 31.56 years.

The following table will show the average age of the whole number of decedents in each of the last five years, and in the aggregate of twenty years from 1858 to 1877, inclusive:

	1878.	1877.	1876.	1875.	1874.	1858–1877. 20 years.
Average age	30.09	30.45	32.37	31.27	29.86	30.53

PARENTAGES OF DECEDENTS AT DIFFERENT AGES.

The following table shows the percentages of decedents in different divisions of age in each of the last six years, and in the aggregate of twenty years from 1853 to 1872, inclusive:

Periods of life.	1878.	1877.	1876.	1875.	1874.	1873.	1853 to 1872.
Under 1 year	16.6	17.4	19.5	20.8	19.9	19.3	17.8
1 and under 2	8.1	8.1	7.4	6.8	7.8	9.2	8.8
2 and under 5	10.3	9.5	7.0	7.0	9.4	8.1	8.7
Total under 5	35.0	35.0	33.9	34.6	37.1	36.6	35.3
5 and under 10	6.2	6.2	4.2	4.0	5.7	5.3	4.8
10 and under 20	6.1	5.4	5.2	5.5	6.0	6.9	6.0
20 and under 30	8.8	8.9	9.1	9.6	8.7	9.1	9.6
30 and under 40	7.6	7.5	7.7	7.9	6.9	7.8	8.4
40 and under 50	6.4	6.6	6.9	7.7	6.8	6.5	7.3
50 and under 60	7.6	7.2	7.5	7.4	7.0	6.4	7.1
60 and under 70	7.9	8.8	9.3	8.6	7.8	7.6	7.6
70 and under 80	8.8	9.5	9.8	8.4	8.1	8.3	7.8
80 and under 90	4.8	4.0	5.2	5.0	4.7	4.5	5.0
90 and over	0.8	0.9	1.2	1.3	1.2	1.0	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The results of a single year, or of two or three years, have little value in arriving at definite conclusions. The occurrence of one or more epidemics in one year, affecting children chiefly, and the occurrence in another year of epidemics affecting adults chiefly, or all ages alike, would make great differences in the ratio of mortality in the different periods of life, in short terms of years. But in periods of twenty years or more the results may be considered as reasonably conclusive.

It will be seen by the preceding table that the average percentage of mortality of children of five years of age and under, in Rhode Island, for a period of twenty-six years, has not exceeded 35.3 per cent. This is a low rate as compared with the statistics of some other States, in which the rate is stated to be as high as from 40 to 42 per cent.

COLORED DECEDENTS.

Considerable public interest has been manifested in the question whether the colored race was self-sustaining, in regard to population, in the colder latitudes of America. A comparison of the births and deaths among this class of people, for a long series of years, in the different States, will be of value in obtaining correct conclusions.

In the State of Rhode Island the statistics in regard to births, marriages, and deaths among the colored people have, for obvious reasons, been reported separately for a considerable number of years.

Age.—The average age of the colored decedents in Rhode Island, in 1878, was as follows:

	Providence City.	Rest of State.	Whole State.
Colored males	16.83 years	38.21 years	21.66 years.
Colored females	31.07 years	33.46 years	31.97 years.

The difference between the white and colored population in the vital statistics of the year 1878 was as follows:

Whites.....one child born in 38.5; one person married in 56.1; one death in 58.8
Colored.....one child born in 36.4; one person married in 39.2; one death in 40.2

In regard to births, marriages, and deaths the numbers are larger in proportion to the population among the colored than among the whites.

The following summary shows the number of births, marriages, and deaths among the colored population of Rhode Island in the last eighteen years, from 1861 to 1878, inclusive:

Total 2,447 births; 1,125 marriages; 2,405 deaths. For every 100 births there were 91 persons married and 98.3 deaths.

The circumstances favorable to the promotion of the physical health and vigor of the colored race are believed to be at least quite as ample in Rhode Island as in any other Northern or Eastern State. When we find that in a period of eighteen years, as seen in the synopsis above, the excess of births over the deaths is only 42, or less than 2 in each 100, and have full knowledge of the fact that the State is having accession annually to the number of colored people by immigration, and that accession largely in the periods of life between 20 and 40 years, and of both sexes, we must conclude that the race is not self-sustaining in this latitude.

CAUSES OF DEATH.

Of the deaths reported cause *unknown*, in 1878, there was in Providence City one in every 124.3. In the rest of the State, one in every 12.6. Whole State, including Providence, one in every 21.1.

In a period of 16 years, 1863 to 1878, inclusive, the annual average of the aggregates of cause reported unknown was as follows:

Providence City, one in every 91.1, or 1.09 per cent. Whole State, one in every 17.6, or 5.6 per cent.

The above statistics present very conclusive evidence of the necessity of requiring, by statute law, an immediate and full report of death and cause of same, and the authorized issuance of a burial permit previous to any final disposal of the dead.

Such report and permit are required by municipal ordinance in the city of Providence, but not elsewhere in the State.

COMPARATIVE RESULTS—1878.

The following table will show the percentage of several principal causes of death to the whole number of specified causes of deaths in the whole State, and in the City of Providence.

Causes of death.	Whole State, 1878.	Providence City.
Apoplexy and paralysis	4.45	3.35
Brain, diseases of	3.28	3.45
Cancer	2.82	2.43
Cholera infantum	3.97	3.60
Consumption	15.98	15.46
Convulsions and fits	2.65	2.94
Croup	2.20	1.98
Debility	1.91	1.83
Diarrhœa	1.25	1.42
Diphtheria	10.28	12.42
Dysentery	.95	0.56
Fevers	3.94	2.84
Heart, diseases of	3.92	4.21
Whooping-cough	1.28	2.18
Hydrocephalus	1.65	1.98
Kidneys, diseases of	1.89	2.38
Liver, diseases of	1.06	0.86
Marasmus	1.30	1.98
Pneumonia and congestion of lungs	7.49	7.10
Scarlatina	2.03	2.89

COMPARATIVE RESULTS—1855–1878.

The following table will show the percentages of deaths from several prominent causes of death in the aggregates of mortality for periods of years varying from 14 to 24; and also the percentages of the parentage, sex, and age of the decedents:

Diseases.	Percentage of total mortality.	Sex.		Parentage.		Divisions of age.						Number of years.
		Males.	Females.	American.	Foreign.	Under 5.	5 to 10.	10 to 20.	20 to 40.	40 to 60.	60 and over.	
Apoplexy and paralysis	3.60	48.5	51.5	77.8	22.2	0.5	0.7	0.4	6.2	24.1	68.1	14
Brain, diseases of	3.80	53.8	46.2	52.1	47.9	24.0	....	....	....	....	....	14
Cancer	2.54	25.1	74.9	66.1	33.9	....	....	....	....	70.1	20.2	14
Cholera infantum	5.74	51.9	48.1	45.7	54.3	100	....	....	....	....	....	14
Consumption, pulmonary	16.96	45.1	54.9	48.7	51.3	....	....	11.8	49.2	23.3	....	19
Croup	1.90	50.8	49.2	42.1	57.9	67.2	20.1	4.3	....	....	....	14
Diphtheria	2.90	49.2	50.8	51.6	48.4	58.1	29.3	....	....	....	....	14
Fevers	3.10	48.2	51.8	58.6	41.4	6.0	6.1	24.1	36.7	15.1	12.0	14
Heart, diseases of	3.91	52.4	47.6	65.6	34.3	....	....	....	14.1	26.2	51.3	14
Pneumonia	6.31	49.0	51.0	57.7	42.3	35.0	2.6	3.3	12.1	17.3	29.7	14
Scarlatina	4.20	47.9	52.1	47.4	52.6	....	....	....	....	....	....	24

(14 yrs.)

CONSUMPTION.

The following table will show the results of the registration of that cause of death by counties for nineteen years, inclusive:

1860–1878.

	Yearly average to population, one in every	Yearly average. No. of deaths.	
Bristol County	442	21.4	or 2.26 in each 1,000
Kent County	403	43.8	or 2.48 in each 1,000
Newport County	492	42.7	or 2.03 in each 1,000
Providence County, towns	403	182.3	or 2.48 in each 1,000
Providence City	349	229.0	or 2.87 in each 1,000
Washington County	452	42.0	or 2.21 in each 1,000

CROUP AND DIPHTHERIA.

These diseases, similar in some respects, are considered together, for the purpose of presenting their various relations, and not from any suspicion that they may be identical.

Sex.—For the period of twenty-one years, the percentage of mortality from croup in the sexes was, in each 100, 50.90 males, and 49.10 females.

In diphtheria the percentage of mortality for the same period (the whole period of the registration of diphtheria) was 47.48 males, and 52.52 females, in each 100 decedents.

Sex and parentage in each 100 *decedents.*

1865–1878.

Disease.	Males.	Females.	Total	American parentage.	Foreign parentage.	Total.
Croup	50.82	49.18	100.00	42.02	57.98	100.00
Diphtheria	49.15	50.85	100.00	51.66	48.34	100.00

In regard to the parentage of the decedents, it will be seen that although the foreign population in the State is considerably less than the American, the decedents from croup are in large excess of foreign parentage, and the decedents from diphtheria are in excess of American parentage.

When we consider the numerical relations of the two classes of population, it will, however, be found that there is a slight excess of *percentage* of mortality from diphtheria of foreign parentage.

SEASON AND MORTALITY.

In the following table croup, diphtheria, and scarlatina, having some characteristics in common, are presented in contrast.

The table will give the average monthly and quarterly per centages of deaths from each disease during the periods named.

Months.	Croup. 1853–1878.	Diphtheria. 1858–1878.	Scarlatina. 1853–1878.
	Per cent.	*Per cent.*	*Per cent.*
January	12.21	9.05	11.65
February	10.66	6.45	11.13
March	8.31	7.34	10.31
First quarter	31.18	22.84	33.09
April	7.05	7.56	8.48
May	5.11	6.31	9.21
June	4.75	6.04	9.01
Second quarter	16.91	19.91	26.70
July	3.26	4.77	6.02
August	3.04	5.81	4.64
September	6.42	8.79	4.53
Third quarter	12.72	19.37	15.19
October	10.66	12.79	6.13
November	13.29	13.11	7.91
December	15.24	11.98	10.98
Fourth quarter	39.19	37.88	25.02
Totals	100.00	100.00	100.00

It will be observed that the above statistics of croup and scarlet fever are for the whole period of twenty-six years, from 1853 to 1878, inclusive, while those of diphtheria are only for the period of twenty-one years, from 1858 to 1878, inclusive, the year 1858 being the first in which deaths from diphtheria were reported.

It will be interesting to study the above table, in relation to the season of greatest mortality, in each of the diseases placed in comparison.

For instance, in the case of croup, we see that the average percentage of a period of twenty-six years, regularly diminishes from the

beginning of the year, until August, in which month we find the minimum percentage, and then as regularly increases through the remainder of the year, the highest percentage being found in December.

In scarlatina, the percentages diminish in an almost equally uniform manner until September, in which the lowest percentage is found, and the only break in the regularity of diminution during the nine months occurring in April. The percentages, then, with entire regularity, increase each month until January, in which is found the maximum.

In diphtheria, for the period of twenty-one years, the percentages diminish, though somewhat irregularly, from and including December, through the first half of the year, and reaching the minimum in July; then increasing quite regularly until November, in which month is found the highest percentage.

It will be noticed that diphtheria anticipates both croup and scarlatina in the time of reaching the lowest percentage, by one month in the case of croup, and by two months in the case of scarlatina.

But aside from the similarity of the three diseases, in the diminution of mortality and prevalence also, as the months of the warmer season advance, there are decided differences in the relative percentages of the several quarterly divisions of the year.

The following summary will present very concisely the differences in the percentages of mortality, from the different diseases, in each of the quarterly periods, as above computed, and by other modes of comparison. It will be kept in mind that the percentages of diphtheria are for a period of five years less than either of the others, but it is hardly probable that a more extended period would materially change the results as to its own percentage of mortality in the different seasons:

Percentages.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.	First four months.	Second four months.	Third four months.	First six months.	Second six months.
Croup	31.18	16.91	12.72	39.19	38.22	16.16	45.62	48.08	51.92
Diphtheria	22.84	19.91	19.37	37.88	30.40	22.94	46.66	42.75	57.25
Scarlatina	33.09	26.70	15.19	25.02	41.28	29.17	29.55	59.79	40.21

These contrasts show very decidedly the variations of the three diseases, in the ratio of mortality, in the different seasons of the year. It will be noticed that in croup and diphtheria the largest mortality is in the last third and last half of the year, and in scarlatina the reverse is the rule, the greater number of deaths occurring in the first third and first half of the year, or more than .41 per cent. in the first third, and nearly .60 per cent. in the first half of the year.

The above results are for considerably lengthened periods of time, and the various relations they present, and the comparisons which have been made, and which can be much farther extended, may be of some value in elucidating the dark aspects, and in helping to the solution of the vexing problems that face the sanitarian at every step in the investigation of the phenomena of life and death.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

FORT RANDALL, DAK.—Under date of June 18, Dr. J. D. Hall, U. S. Army, reports two cases of measles in the family of a married soldier at that post. The family arrived there three weeks ago, and the disease was contracted at a hotel on the way.

HARRISON COUNTY, MISS.—Dr. F. S. Hewes, secretary of the county board of health, sends the following resolutions adopted by that board:

Extracts from proceedings board of health for Harrison County, Miss., at a regular meeting held June 21, 1880.

Resolved by the board of health for Harrison County, Miss., That the rules and regulations of the National Board of Health for river inspection service, Code A, so far as they can be applied to steamers navigating the Mississippi Sound, and the rules and regulations of said national board for inspection of railroads, to prevent the introduction of infectious diseases into the United States from foreign countries, and from one State into another, be, and are hereby, adopted as the rules and regulations of this board, and that the sanitary inspectors appointed by this board shall be governed thereby in the performance of their duties.

Resolved, That the resignation of Dr. G. N. Smith as sanitary inspector for the west half of this county be, and is hereby, accepted.

Resolved, That Dr. Charles L. LeRoux be, and is hereby, appointed sanitary inspector for the west half of this county, to be stationed at Pass Christian, vice Dr. G. N. Smith, resigned.

MISCELLANEOUS.

NEW BEDFORD, MASS., June 11.—The health officer forwards the following report from quarantine station: Ship Milton, 83 days from Talcahuano, with clean bill of health dated March 25, signed by W. Crosby, U. S. consul; has not touched at any intermediate port, nor communicated with any vessel on the voyage. April 1 small-pox appeared on board, and up to May 8 there were 9 cases and 4 deaths, occurring April 6, 22, 25, and May 2. No other contagious disease on board. Number of crew at sailing, 21, and 2 "stow-aways"; no passengers. Cargo, oil. The ship will be detained at quarantine as may be required.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

The following reports, for the week ending June 19, are from places requiring burial permits and having less than 5,000 population:

Bridgewater, Mass., 4,000; one death. East Haven, Conn., 1,200; no deaths. Edgartown, Mass., 1,400; no deaths. Morgan City, La., 2,500; no deaths. Murfreesborough, Tenn., 3,500; diarrhœa 1. Saint Augustine, Fla., 2,500; accident 1. San Diego, Cal., 3,000; no deaths. Shelbyville, Tenn., 2,000; old age, 1. Total population, 20,100; total deaths, 4; annual rate per 1,000, 10.3.

The following reports, for the week ending June 19, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 2; under 5 years, 1; malarial fever 1, pneumonia 1. Allegheny, Pa., 75,000; deaths, 25; under 5 years, 16; consumption 1, diarrhœa 7, enteric fever 2, scarlet fever 1, pneumonia 1, whooping-cough 1. Bath, Me., 10,000; no deaths. Battle Creek, Mich., 7,500; no deaths. Belfast, Me., 5,278; deaths, 2; pneumonia 1. Boulder, Colo., 3,500; no deaths. Brattleborough, Vt., 6,500; deaths, 4; consumption 2, measles 1. Cambridge, N. Y., 1,850; no deaths. Chico, Cal., 2,500; no deaths. Circleville, Ohio, 6,400; deaths, 5; under 5 years, 3; consumption 1, diarrhœa 1. Clinton, Mich., 1,200; no deaths. Columbus, Ga., 9,000; deaths, 3; under 5 years, 2. Corinth, Miss., 2,300; no deaths. Crystal Springs, Miss., 1,000; no deaths. Cumberland, Md., 12,000; deaths, 3, under 5 years; diarrhœa 2. Dallas, Tex., 20,000; deaths, 2, under 5 years; croup 1, malarial fever 1. Davenport, Iowa, 27,000; deaths, 5; consumption 1. Decatur, Miss., 1,000; no deaths. East Saginaw, Mich., 18,000; deaths, 6; under 5 years, 4; consumption 1, diphtheria 2, diarrhœa 1. Fayette, Miss., 300; no deaths. Flint, Mich., 10,000; deaths, 2, from consumption. Gunn City, Mo., 125; no deaths. Helena, Mont., 3,500; one death. Indianola, Tex., 900; no deaths. Iuka, Miss., 1,000; no deaths. Jefferson, Tex., 3,250; deaths, 3; under 5 years, 2; malarial fever 1. Kenosha, Wis., 5,000; deaths, 2; under 5 years, 1. La Fayette Springs, Miss., 300; no deaths. Lansingburgh, N. Y., 7,150; old age 1. Lebanon, Pa., 9,000; no deaths. Little Falls, N. Y., 5,900; accident 1, under 5 years. Louisiana, Mo., 5,200; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Madison, Ind., 12,000; deaths, 9; under 5 years, 4; consumption 2, diphtheria 1, diarrhœa 1. Milledgeville, Ga., 4,000; one death, under 5 years. Mount Pleasant, Iowa, 5,000; deaths, 2; consumption 1. Muscatine, Iowa, 7,500; two deaths. Muskegon, Mich., 13,000; pneumonia 1, under 5 years. Natchez, Miss., 10,000; deaths 3; under 5 years, 1; malarial fever 1. Nebraska City, Nebr., 5,000; whooping-cough 1, under 5 years. Ocala, Fla., 1,000; no deaths. Oshkosh, Wis., 18,000; deaths, 2; under 5 years, 1; pneumonia 1. Painesville, Ohio, 5,000; deaths, 3; under 5 years, 1; consumption 1, old age 1. Pearlington, Miss., 1,500; no deaths. Phœnixville, Pa., 6,000; consumption 1. Pleasant Hill, Miss., 250; no deaths. Pontotoc, Miss., 600; no deaths. Port Gibson, Miss., 1,400; no deaths. Port Jervis, N. Y., 10,000; no deaths. Portsmouth, Va., 14,000; deaths, 6; diarrhœa 2, scarlet fever 1. Pulaski, Tenn., 2,100; one death. Ripley, Miss., 1,200; no deaths. Rock Island, Ill., deaths, 5; diarrhœa 2, malarial fever 2; no population given. Rockland, Me., 7,000; one death. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 23,000; deaths, 10; under 5 years, 4; consumption 3, diarrhœa 3, old age 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 3; under 5 years, 2. Tampa, Fla., 1,200; no deaths. Titusville, Pa., 9,000; enteric fever 1. Verona, Miss., 1,000; no deaths. Wesson, Miss., 2,000; no deaths. Winona, Minn., 10,000; deaths, 2; consumption 1. Youngstown, Ohio, 17,000; deaths, 6; under 5 years, 3; consumption 2, diarrhœa 1. Total population, 482,357; deaths under 5 years, 55; total deaths, 124; annual rate per 1,000, 13.4.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 19, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ....Portland	36,400	3	14	20.0	7	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
N. H ....Concord	14,000	1	5	18.5	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Mass ....Boston	375,000	43	122	17.0	21	1	4	8	3	.....	.....	.....	11	.....	1	.....	.....	20	1
Cambridge	50,400	7	18	18.6	3	.....	.....	1	.....	.....	.....	.....	2	.....	1	.....	.....	2	.....
New Bedford	27,000	2	9	17.3	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Newburyport	13,800	3	6	22.6	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....
Marblehead	7,500	.....	1	6.9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	48,680	3	18	19.2	4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Lawrence	39,000	4	12	16.0	4	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	52,000	5	17	17.0	1	1	3	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Lowell	54,000	3	11	10.6	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Lynn	37,000	3	9	12.6	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brockton	13,000	1	2	8.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Holyoke	22,500	4	5	11.6	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Milford	10,000	2	5	26.0	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Chicopee	11,000	2	7	33.1	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Somerville	23,500	2	4	8.8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I.....Providence	104,500	15	34	16.9	1	.....	3	1	.....	.....	5	.....	5	.....	2	.....	.....	11	1
Conn ....New Haven	60,000	6	19	16.5	2	.....	2	1	.....	.....	.....	.....	2	.....	1	.....	1	.....	3
Waterbury	20,000	4	13	33.9	3	.....	.....	.....	.....	.....	1	.....	1	1	1	.....	.....	.....	.....
Vt .....Burlington	16,500	2	3	9.5	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. Y .....New York	1,111,940	386	707	33.1	90	11	102	20	2	8	8	.....	73	5	8	.....	8	244	31
Brooklyn	564,448	124	227	20.9	21	7	52	10	.....	2	2	.....	23	4	2	.....	1	82	8
Yonkers	20,000	2	3	31.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Poughkeepsie	21,000	.....	1	2.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburgh	17,800	2	3	8.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Utica	35,000	1	6	8.9	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Binghamton	18,000	.....	1	2.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Buffalo	170,000	17	50	15.3	8	.....	1	1	.....	.....	2	.....	4	.....	.....	.....	.....	5	5
Seneca Falls	6,300	.....	2	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watertown	10,666	.....	1	4.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
N. J .....Hudson County	209,000	35	81	20.2	6	2	12	.....	2	3	3	.....	9	.....	8	.....	.....	23	6
Newark	130,000	21	47	18.8	8	.....	2	3	.....	.....	.....	.....	.....	.....	1	.....	.....	9	1
Orange	12,000	1	3	13.0	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Plainfield	8,000	.....	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa .....Philadelphia	901,380	155	335	29.3	59	2	.....	7	4	.....	.....	.....	10	.....	1	1	4	.....	.....
Erie	30,000	4	6	10.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Pittsburgh	150,000	51	85	29.5	6	.....	22	3	4	.....	2	.....	3	7	.....	.....	3	21	3
Del .....Wilmington	45,000	10	24	27.8	1	.....	.....	1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
Md .....Baltimore	400,000	133	216	28.1	19	1	62	4	1	1	12	.....	2	1	1	.....	5	90	2
District of Columbia	170,000	64	106	32.5	12	.....	24	2	1	3	.....	.....	7	.....	.....	.....	.....	36	4
Va.....Norfolk	26,200	13	26	51.7	3	.....	7	.....	.....	2	1	.....	.....	.....	.....	.....	.....	10	.....
Richmond	80,000	28	40	26.0	7	.....	13	.....	2	.....	.....	.....	3	1	.....	.....	.....	16	.....
Lynchburg	21,000	4	7	17.3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C .....Wilmington	17,000	6	10	30.6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C .....Charleston	57,000	18	46	42.1	7	.....	8	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Ga .....Savannah	33,250	10	25	39.2	1	.....	2	.....	.....	1	.....	.....	1	.....	1	.....	.....	4	.....
Augusta	27,000	10	12	23.1	1	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atlanta	41,548	5	16	20.0	1	.....	1	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....	1
Rome	5,000	.....	1	10.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla .....Jacksonville	12,000	1	4	17.3	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Miss.....Vicksburg	15,000	.....	2	6.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La .....New Orleans	210,000	48	114	28.3	11	.....	21	1	1	6	.....	.....	8	7	.....	.....	1	.....	.....
Shreveport	7,000	1	2	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Tex.....San Antonio	23,000	3	8	18.1	2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	3	.....
Ark .....Little Rock	22,000	9	13	30.8	.....	.....	4	.....	.....	4	.....	.....	1	.....	.....	.....	1	.....	.....
Tenn ....Nashville	37,000	17	33	46.5	2	.....	13	.....	1	.....	1	.....	2	.....	.....	.....	3	15	.....
Clarksville	6,000	1	4	34.7	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Ky .....Louisville	175,000	43	64	19.0	4	.....	16	1	.....	1	1	.....	7	.....	1	.....	1	21	1
W. Va ...Wheeling	29,500	9	14	24.7	2	.....	4	.....	1	1	1	.....	1	.....	.....	.....	.....	7	.....
Ohio .....Cincinnati	280,000	101	145	27.0	9	.....	37	1	.....	.....	3	.....	9	10	.....	.....	1	55	5
Cleveland	175,000	.....	61	18.1	2	.....	6	6	1	.....	6	.....	2	.....	.....	.....	.....	.....	2
Dayton	39,000	8	16	21.4	1	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	1
Gallipolis	5,500	1	1	9.5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind .....Evansville	40,000	7	10	13.0	3	.....	6	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1
Indianapolis	100,000	31	48	25.0	7	.....	11	.....	1	1	3	.....	2	1	.....	.....	2	16	1
Richmond	14,000	2	4	14.8	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jeffersonville	10,500	4	6	29.8	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Ill .....Chicago	500,000	102	168	17.5	17	5	30	9	1	.....	5	.....	12	1	2	3	1	56	6
Peoria	40,000	.....	9	11.7	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Elgin	8,500	.....	1	6.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Wis .....Milwaukee	127,000	18	38	53.4	5	1	.....	3	1	1	1	.....	5	.....	.....	.....	.....	9	4
Beloit	5,000	.....	3	31.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn ....Saint Paul	.....	9	16	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	1	4	1
Iowa ....Burlington	26,000	2	4	8.0	1	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....
Dubuque	30,000	.....	7	12.1	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	15,800	1	7	24.3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Mo .....Saint Louis	500,000	117	189	19.7	14	.....	50	1	1	4	.....	.....	4	7	.....	.....	.....	74	10
Nebr ....Omaha	30,000	3	5	8.7	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	3	5	10.4	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Cal .....San Francisco	305,000	26	79	13.5	17	.....	4	1	2	1	1	.....	7	1	1	.....	1	11	1
Sacramento	25,000	.....	10	20.8	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Los Angeles	14,000	2	6	22.3	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,284,692	1,784	3,518	22.1	417	32	611	90	36	42	67	.....	249	50	35	4	35	860	113

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 116 white, 6 colored. Rate per 1,000, white 16.3, colored 62.5. Providence has 100,500 white, 4,000 colored; deaths, 30 white, 4 colored. Rate per 1,000, white 15.5, colored 52.1. Wilmington, Del., has 39,000 white, 5,000 colored; deaths, 20 white, 4 colored. Rate per 1,000, white 26.7, colored 41.7. Baltimore has 343,715 white, 56,285 colored; deaths, 160 white, 56 colored. Rate per 1,000, white 24.0, colored 51.9. District of Columbia has 114,000 white, 56,000 colored; deaths, 49 white, 57 colored. Rate per 1,000, white 22.4, colored 53.4. Norfolk has 14,900 white, 11,300 colored; deaths, 7 white, 9 colored. Rate per 1,000, white 24.5, colored 87.7. Richmond has 46,000 white, 34,000 colored; deaths, 19 white, 21 colored. Rate per 1,000, white 21.5, colored 32.2. Lynchburg has 10,000 white, 11,000 colored; deaths, 3 white, 4 colored. Rate per 1,000, white 15.6, colored 18.9. Wilmington, N. C., has 6,714 white, 10,286 colored; deaths, 3 white, 7 colored. Rate per 1,000, white 23.3, colored 35.4. Charleston has 25,000 white, 32,000 colored; deaths, 14 white, 32 colored. Rate per 1,000, white 29.2, colored 52.1. Savannah has 18,230 white, 15,020 colored; deaths, 6 white, 19 colored. Rate per 1,000, white 17.1, colored 66.0. Augusta has 16,176 white, 10,824 colored; deaths, 7 white, 5 colored. Rate per 1,000, white 22.5, colored 24.1. Atlanta has 25,373 white, 16,175 colored; deaths, 7 white, 9 colored. Rate per 1,000, white 14.3, colored 29.0. Jacksonville has 7,000 white, 5,000 colored; deaths, 1 white, 3 colored. Rate per 1,000, white 7.4, colored 31.2. New Orleans has 155,000 white, 55,000 colored; deaths, 70 white, 44 colored. Rate per 1,000, white 23.5, colored 41.7. Shreveport has 3,500 white, 3,500 colored; deaths, 2 colored. Rate in table. Nashville has 26,000 white, 11,000 colored; deaths, 22 white, 11 colored. Rate per 1,000, white 44.0, colored 52.1. Clarksville has 3,000 white, 3,000 colored; deaths, 1 white, 3 colored. Rate per 1,000, white 17.3, colored, 52.1. Louisville has 153,125 white, 21,875 colored; deaths, 46 white, 18 colored. Rate per 1,000, white 15.6, colored 42.9. Total white population, 1,477,233; deaths, 581; annual rate per 1,000, 20.5. Total colored population, 354,979; deaths, 324; annual rate per 1,000, 48.1.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	93			1	11																	4	1		4						1									13	8	2	92
Albany Hospital	Albany, N. Y	do	125	52		1																											3			4									12	10		54
Charity Hospital	New York City	do	1000		7	9	2	56					3	2		26									1	2		16					1		1	6									122	139	8	669
Emigrant Hospital	Ward's Island, N. Y	do	458	67		1	4							2		10				5	1	4		3				1					4	2	1	1	2	4		16				1		7	16	5	53
German Hospital	New York City	do	80	71																					3																								77
Hart's Island Hospital	Hart's Island, N. Y	do	300	205																																									5	8		202
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	5																																												5
Rochester City Hospital	Rochester, N. Y	do	125	67				3																												2									4	6	1	64
Saint Mary's Hospital	do	do	320	230													2								1	1																							230
Saint Barnabas Hospital	Newark, N. J	do	45	31	1	1		3					1			1										1		2																				29
Saint Michael's Hospital	do	do	130	122	1		1	6						1											4	2		11								7									21	15	1	127
Memorial Hospital	Orange, N. J	do	13	8				1																																						1	1		8
Germantown Hospital	Germantown, Pa	do	25	20	1																1																									5	1		24
Jewish Hospital	Philadelphia, Pa	do	40	17																																										7	3		21
Homeopathic Hospital	Pittsburgh, Pa	do	40	22																					1																					3	3		22
Saint Franciscus Hospital	do	do	125																		1													1														
Freedmen's Hospital	Washington, D. C	do	300	241	4								1		1																									2							20	19	3	239
Providence Hospital	do	do	160	111				22																	6	4		21																	21	16		113
Freedmen's Hospital	Augusta, Ga	do	50	18				1																	1										1												15
Georgia Infirmary	Savannah, Ga	do	50	39				1								1	1																												1	2	1	37
Saint Mary's Hospital	Galveston, Tex	do	300	82				5						2		3										2		3						1		3									10	5		85
Cincinnati Hospital	Cincinnati, Ohio	do	500	290	4	3		3					3	4		1									2			5								1				1		1			50	58	5	283
Charity Hospital	Cleveland, Ohio	do	150	34				3																																					8	6		24
Saint Luke's Hospital	Detroit, Mich	do	25	12																																												12
Do	Chicago, Ill	do		3	1	1		1						1																														1	2		2
City Hospital	Saint Louis, Mo	do	411	215	4			22					4	1		2									7	2	1	13					3	3		2									46	36	9	216
Saint John's Hospital	do	do	75	18																							1																			2	2	1	17
Saint Louis Hospital	do	do	250	68	1			9																	9	10		15					1	2		5									12	14		66
German Hospital	San Francisco, Cal	do	150	64		1		2																		1		2																	2	8		60
Naval Hospital	Chelsea, Mass	do	100	15				1																												1	2											1	14
Do	Brooklyn, N. Y	do	115	43	1			3							1																		4	1	1	4									3	1		45
Do	Washington, D. C	do	50	12				1																																					4	1		15
Do	Norfolk, Va	do	125	56				7																												1									1		1	56
Do	Pensacola, Fla	do	20	1				1																																								1
Do	Mare Island, Cal	do	77	29	1			5																																					1			5
Hospital for Nervous Diseases	New York City	Special	1000					5																																								
Riverside Hospital	do	Contagious diseases	150	8														1		1																									2		3	2	3		7
Municipal Hospital	Philadelphia, Pa	do																																														5
Nursery and Child's Hospital	New York City	Children												1																																		1	
State Hospital for Women and Children	Philadelphia, Pa	Women and children	18	10																																										1			11
Children's Hospital	Washington, D. C	Children	72	40																																									6	5		41
Women's Hospital & Foundlings' Home	Detroit, Mich	Women and children																																											1	4		25
Women's Hospital	Chicago, Ill	Women	19	18																																									1	1		18
Insane Hospital	Augusta, Me	Insane	400	405																																									1	1		405
New Hampshire Asylum for Insane	Concord, N. H	do	300	291																																									3	1		293
Boston Lunatic Hospital	Boston, Mass	do	200	168																																									1	4	1	164
State Lunatic Hospital	Worcester, Mass	do	650	498																																									6	4		500
Retreat for Insane	Hartford, Conn	do	150	145																																										4		141
Hospital for Insane	Middletown, Conn	do	515	515			1																																						6	4	2	515
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do																																										12	2	4	1251
Hudson River State Hospital	Poughkeepsie, N. Y	do		244																																									8	2	1	249
Marshall Infirmary	Troy, N. Y	do	200	134			2								1								1																					6	2		138
Willard Asylum	Willard, N. Y	do		1582																																								7	2	2	1585
State Hospital for Insane	Danville, Pa	do	700	473																																									2	1		474
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	500	577																																								4	1	1	579
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500																																									5	4		389
E. L. Asylum	Williamsburg, Va	do	335	328																																												328
North Carolina Insane Asylum	Raleigh, N. C	do		283																																								1	1		283
Alabama Insane Hospital	Tuscaloosa, Ala	do	420	406																																									4	2		408
Lunatic Asylum	Jackson, Miss	do	425	4			3						2	2							1		1	2	2																			6	2		5
State Lunatic Asylum	Austin, Tex	do		363																																								3	5	1	360
Longview Asylum	Carthage, Ohio	do		668			1																																						5		1	670
Michigan Asylum	Kalamazoo, Mich	do	660	655																																									2	6	1	650
Minnesota Hospital for Insane	Saint Peter, Minn	do																																											9	3	1	665
Insane Asylum	Saint Louis, Mo	do	332	331																																									3	1	1	332
Insane Asylum of California	Stockton, Cal	do	1118	1117																																									3	2		1118

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	June 12	2	20.9													58
Canada	Kingston	16,000	June 19	4	12.8													
Bermuda	Hamilton	14,867	June 22	3	10.5													79
Cuba	Havana	195,437	June 12	183	48.9				25		13		3					80
Do	...do	195,437	June 19	227	60.6				33		17		4					84
Hayti	Gonaives	6,000	May 15															86
Do	do	6,000	May 22	3	26.1													86
Aspinwall	Colon	3,000	June 12	4	69.6													85
Mauritius	Port Louis	64,908	Apr. 25	53	42.5													75.4
Do	...do	64,908	May 2	42	33.6													75.8
Do	...do	64,908	May 9	50	40.1													74.6
Do	...do	64,908	May 16	46	37.1													71.0
Mexico	Acapulco	3,500	May 22	3	44.7													85
Do	...do	3,500	May 29	6	89.4													86
Do	...do	3,500	June 5	4	59.6													87
San Salvador	Sonsonate	6,000	May 15	3	26.1													82
Do	...do	6,000	May 22	3	26.1													82
Teneriffe	Santa Cruz	16,610	May 22	12	37.7							8	1				5	72
Do	...do	16,610	May 29	7	21.9							4	2				4	72
Ireland	Queenstown	10,000	June 12	4	20.8													
Do	Belfast	230,000	June 12	101	28.8					3		28	1			13		52.7
Do	Dublin	314,666	June 12	256	42.3						13		8		5		39	
Scotland	Dundee	155,100	June 5	70	23.5							1		1		30		52.6
Do	Glasgow	589,598	June 5	241	21.3								9				23	52.4
Do	Leith	58,479	June 12	27	24.0												6	51.1
England	London	3,254,260	June 5	1,306	18.6						8		11		2		159	
Do	Newcastle	148,000	June 6	67	23.3												6	51
Do	Liverpool	544,056	June 5	255	24.5							2	3	13	2	19	32	53.2
Do	...do	544,056	June 12	279	26.8						3	2	1	17	3	40	39	52.9
Do	Leeds	313,929	June 5	131	21.4												8	51.7
Do	Sheffield	304,938	June 12	106	18.1													50.5
Do	Tunstall	201,442	June 5	74	19												8	
Do	Stoke-on-Trent	14,007	May 29	13	48.3								1					
Wales	Cardiff	82,364	June 12	32	20.2								1				4	52.9
France	Paris	1,988,806	June 3	1,071	28.1						54		37				117	
Do	...do	1,988,806	June 10	1,089	28.6						50		32				135	
Do	Lyons	342,815	May 29	175	26.6						7		3				4	
Do	...do	342,815	June 5	170	25.8						7		1				9	
Do	Rouen	104,902	June 12	42	20.9													
Do	Havre	92,068	June 5	47	26.6													59
Switzerland	Geneva	52,077	June 5	12	12.3													
Do	Zurich	22,103	June 5	3	7.1													
Holland	Amsterdam	316,952	June 5	180	29.6								3				2	56
Do	Rotterdam	150,378	June 12	64	22.2					2		1				44		
Germany	Barmen	93,000	June 5	61	33.4												7	52
Do	Berlin	1,087,500	May 29	700	33.5							16	6	1	1	141	102	62
Do	Brunswick	74,000	May 29	33	23.2								1				2	
Do	Breslau	276,000	May 29	164	30.9								2		1		17	61
Do	Hamburg	405,000	May 22	214	27.6							1	5				10	
Do	Mannheim	50,500	June 5	21	21.7													57
Do	...do	50,500	June 12	24	24.7													61
Do	Frankfort-on-Main	128,000	May 29	65	26.5												5	84
Do	...do	128,000	June 5	66	26.4												4	67
Saxony	Chemnitz	90,808	May 29	111	63.8										4		10	67
Do	Leipsic	150,836	June 5	61	21												7	64
Do	...do	150,836	June 12	67	21.3												5	60
Brussels	Belgium	406,638	June 5	170	21.4							5	1			17	8	57
Italy	Venice	141,004	May 8	71	26.2								3				3	59
Do	...do	141,004	May 15	51	18.9						1		1				1	65
Do	...do	141,004	May 22	72	26.6												7	61
Do	...do	141,004	May 29	63	22.7						3						4	71
Do	Genoa	180,000	June 5	68	19.7													68
Do	...do	180,000	June 12	83	24.1													66
Do	Leghorn	97,963	June 12	44	23.5								1					68
Austria	Trieste	128,233	May 29	102	41.5					4	4							
Do	Vienna	746,243	June 5	406	28.4						9		3				14	58
Hungary	Buda-Pesth	333,551	May 29	255	40.1						6		4				10	
Russian Poland	Warsaw	357,169	May 29	162	25.1													60
Sweden	Stockholm	169,429	May 29	73	23.6												8	56
Norway	Christiania	116,801	May 29	33	14.7					6		1				12	6	52
Spain	Cadiz	65,028	June 5	42	33.7													74
Morocco	Tangier	15,000	May 29	27	73.9					15	2							70
Barbary	Tripoli	20,000	May 29	13	34.9													79.2
Cape Colony	Cape Town	35,000	May 17	22	32.8													70
Do	...do	35,000	May 24	24	35.8													68
Seychelles Islands	Mahé	12,000	Apr. 17	5	21.7													85
Do	...do	12,000	Apr. 24	4	17.4													82
Do	...do	12,000	May 1	2	87													85
Do	...do	12,000	May 8	2	87													84
Do	...do	12,000	May 15	3	12.9													84
Do	...do	12,000	May 22	7	30.4													83

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

Frank P. Foster, M. D.,
33, E. 28th St., New York.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, JULY 10, 1880. [No. 2.

YELLOW FEVER AT THE NEW YORK QUARANTINE.

Dr. W. M. Smith, health officer, sends the following report, under date of June 25:

REPORT OF SICKNESS ON THE STEAMSHIP COLON.

The steamship Colon, from Aspinwall, June 7, 1880, arrived at lower quarantine on the 15th instant.

The surgeon reported that the day of sailing a passenger named Owen McLean, a native of Ireland, aged 36, was taken sick and died June 12.

The man had been on the isthmus working in a quarry for several months. Was in Aspinwall two days before sailing. The history of this case during its progress is very imperfect. Slight chills, headache, pains in the back, scanty urine, and towards the last entire suppression and partial convulsions, is the sum of the observations in this case communicated by the physician of the steamship.

June 11, Eugene F. Strobel, another passenger, aged about 35, was taken sick, and removed to Swinburne Island Hospital the morning of the 16th This man had been residing on the isthmus eighteen months, engaged at the Empire Gold Mining Company. When brought into hospital he was insensible. Pulse 60; extremely feeble; restlessness, alternating with brief periods of stupor; the skin jaundiced over the whole surface; the countenance suffused and darkened by capillary congestion, blended more or less with the icterus, gave a brown and almost bronzed appearance to the face; dark-colored blood had effused from the gums and incrustated on the lips and at the angles of the mouth. Some hours before leaving the steamer he had vomited a dark, grumous-looking fluid. This was repeated on the way to the hospital, and continued at short intervals until a short time before death. The ejections noticed had a dark, granulated appearance, evidently changed blood. There was no opportunity to secure urine for analysis. The steamer's physician reported the secretion from the kidney very scanty and albuminous. The patient died at 7 p. m.

Autopsy 15 hours after death.

A section from the anterior lobe of the liver, under the glass, exhibited the following conditions: Slight increase of connective tissue, some fat evenly distributed; deeply pigmented; pigment arranged around the central vessels; intralobular veins dilated, and atrophy of liver-cells around them.

The Colon was detained for observation.

The morning of the 16th visited the Colon again, and found James Watson, a passenger, sick. A careful examination discovered the fact that he had been indisposed since the 14th, but did not complain to the doctor until after the visit of the quarantine officer, the 15th. The evening of the last-mentioned date complained of frontal headache and pain in the loins; pulse 100; surface temperature high, as determined without a thermometer. The doctor gave him a cathartic and 40 grains of quinine in the first 12 hours, subsequent to his attention being called to him. At 9 a. m. of the 16th I visited him at the steamship. Pulse 95; temperature 104; face flushed; sclerotic injected; headache, and pain in the loins. He was immediately removed to Swinburne Island Hospital. Vomited several times on the way. Nothing unusual in the appearance of the ejections.

June 17.—Visited Watson at 9 a. m. Said he was better; no pain; complained of nothing but weakness; sclerotic much injected; pulse 90; temperature 103½. Visited at 6 p. m. of same day. Pulse 85, feeble and irregular; muscular tremor; complained of being "so weak"; said he had passed no water during the day. Nurse said secretions from kidneys night before had been very scanty; had several movements of the bowels; dejections dark and "tarry."

18th. Patient much prostrated; muscular tremor; could scarcely carry cup to his mouth; complete suppression of urine; intellect clear; no further movement of bowels; occasional vomiting; ejections very dark; pulse 90; temperature 103.

19th. Visited patient at 6 a. m. Was quiet, but excessively prostrated; no discharge of urine; pulse irregular, 95; temperature 102½; vomited during the night several times; ejections the color of dark port wine; intellect clear; has vomited at intervals of 3 or 4 hours; quiet, calm, and restful. Patient died at 11 a. m., exhaustion being the prominent symptom; intellect clear until an hour previous to death.

Autopsy 20 hours after death.

Mucous coat of stomach congested; patches the size of nickel penny to 50-cent piece intensely ecchymosed. A few lines of mucous membrane, comparatively free from congestion, and then another patch of mucous membrane of variable size of dark brown vessels loaded with blood. The kidneys were, to the unassisted eye, intensely congested; bladder empty; liver studded by small patches of vascular net-work; inferior surfaces intensely loaded by what seemed to be hypostatic congestion, a deep brown hue extending 3 or 4 lines into the parenchyma. One section of kidney appeared to the unassisted eye intensely congested Microscopical examination showed no interstitial changes. Section through the pyramid, from cortex to apex, shows the ascending and descending tubes in a condition of acute parenchymatous nephritis; in other words, acute fatty degeneration; convoluted tubes are in same condition; many tubes show no epithelium at all. Liver very fat; considerable pigment arranged around the central vessels; central vessels dilated.

In conclusion, I would say that the microscopical examination is not complete in the above cases. A more extended and careful examination will be given them.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

DES MOINES, IOWA.—Dr. L. F. Andrews, secretary of the State board of health, forwards blank forms for reporting and recording contagious diseases and their results; also brief circulars giving directions concerning small-pox and diphtheria. The papers indicate an active effort on the part of the board to promote the public health and to collect and preserve the records of diseases.

HAVANA, CUBA.—During the week ending June 22 there were 35 deaths from yellow fever, of which 12 were among the citizens and 23 in the military hospitals. Several Spanish vessels at the wharves are reported to have had cases on board. Eight deaths from small-pox are recorded for the week.

During the week ending June 25 there were 46 deaths from yellow fever, of which 18 were among the citizens and 28 in the military hospitals. Several vessels which have had yellow fever on board have gone into the bay at the risk of infecting vessels at anchor there. Only two deaths from small-pox are reported for the week.

NAVASOTA, TEX.—Under date of July 2, Dr. A. R. Kilpatrick reports the total population, by the last census, as 1,645, which is much less than the previous estimate. In May there were 6 deaths, 4 white and 2 colored, and one still-birth. Three of the four whites died of consumption, but were not residents. In June the deaths were, three white children, one from cholera infantum and two from congestion of the brain; one colored infant, from diarrhœa. The lowest temperature in May was 58°, on the 2d; the highest, 94°, on the 12th; rain on 9 days. In June, the lowest temperature 65°, on the 18th; highest, 94°, on the 1st; rain on 9 days. For the two months 12 births are reported, 6 white and 6 colored.

PASS CHRISTIAN, MISS.—Under date of June 8, Dr. C. L. Le Roux gives the following account of this place:

Pass Christian is situated on the New Orleans and Mississippi Railroad, 15 miles east from Mississippi City, the county seat of Harrison County, and 5 miles west from the town of Shieldsboro' (Bay Saint Louis), the county seat of Hancock County. It has, in winter, a population of about 2,000 inhabitants, 400 of whom are colored. The town is composed of only two streets, running parallel to each other, east and west, and the whole length of which extends for a distance of 5 miles along the Gulf Sound, and so near the beach that the houses, all facing the sea-breeze, enjoy a constant and thorough ventilation. The rear portion of the town is protected by a dense forest of pine-trees from the north winds. It being a favorite summer resort, the summer population is at least double that of winter. It enjoys the reputation of being one of the healthiest spots in the United States. Dr. G. N. Smith is the oldest resident physician, and in a practice of 25 years only saw here, as far as he can remember, 4 cases of membraneous croup, 1 of diphtheria, not a single case of typhoid fever originating here; but very few cases of measles,

or of scarlet fever; these due to contact with cases that had come from New Orleans, the type of which is invariably very mild. There is no malaria, or at least very little. A few cases are seen in the summer and fall presenting a bilious and intermittent character, the duration of which is only of from 2 to 5 days, and readily yielding to the administration of a light mercurial purgative and a few grains of quinine. As for yellow fever, it has always been traced to importation from New Orleans, and the cases are generally very mild. Between the years 1867 and 1868, covering an interval of 11 years, there was not a single case of yellow fever at the Pass, in spite of all communications being left perfectly free and no extra sanitary measures employed. In 1878 there were 222 cases, 18 of which proved fatal. One-half of these 18 fatal cases were paupers, and either received inadequate attention or none at all. The supply of water comes chiefly from bored or dug wells, their depths varying from 12 to 20 feet, in a soil composed almost entirely of coarse white sand. There are a few cisterns above ground, but very few under ground. The privies, almost universally, stand at a good distance from any water supply; the majority are composed of a simple hole dug into the ground, some few having movable receptacles. The drinking water has always been considered of very good quality, the best being derived from natural springs which never go dry, and several of which are to be found on the adjoining beach.

The streets and houses are kept in a fair condition of cleanliness, even those occupied by the blacks.

One mile and a quarter from our shore there is a sufficient depth of water to permit large vessels to come in for lumber, most of which are from Havana and Vera Cruz. They are first boarded by Dr. Martin at Ship Island, treated according to the rules of both the National and our county boards of health, and boarded a second time by Dr. Le Roux, health officer of Harrison County, after the vessel has been anchored near the shore, and before any communication is allowed with the land. This second boarding is necessary, for some of these vessels might come directly into the harbor of Pass Christian, especially during the night, without having stopped at Ship Island. There are also two steamers running regularly, and making several trips a week, touching at our wharves to land freight and passengers: one running only between New Orleans and Ocean Springs, and the other between Mobile and New Orleans.

The rules and regulations of the National Board of Health will be carried out concerning these steamers, but it would be well to have an inspector both in New Orleans and Mobile to look after their freight and passengers before they leave those cities, and a certificate granted them by said inspector, to be handed by the captain in command to the health officer stationed at any of the coast landings, and by him examined into before any freight or passengers be allowed to come ashore. In case of necessity, such steamer will be ordered and accompanied by the health officer to Ship Island, cases of sickness taken care of, and the steamer treated according to the rules of the National Board.

The railroad cars and passengers coming from or going to New Orleans will also be looked after as soon as any cases of fever appear at any point on the road.

PENSACOLA, FLA.—Dr. R. B. S. Hargis, under date of May 23, makes the following report on this city:

Pensacola is situated on the north side of Pensacola Bay, nine miles from the entrance to the harbor. It is in latitude 30° 19′ N., longitude 87° 16′ 9″ W., and lies fifteen feet above the level of the water. Marshes of small extent appear here and there within the corporate limits of the city and vicinity. The soil bordering these marshes, consisting mostly of a sandy loam, is productive, and cultivated by the horticulturists with abundant success. Malarial affections prevail in the vicinity of these cultivated tracts in the latter part of summer and during the fall until frost appears, but are of a mild type, and tractable under judicious treatment. It is scarcely necessary to say that by proper draining malarial diseases in these localities would become extinct.

The number of inhabitants of Pensacola is estimated to be, in round numbers, about 10,000. These figures include the transient or floating population; the number of settled residents being computed at about 8,500, of which the colored portion of the population may be set down at one-third of that number, say about 2,800.

For nearly thirty years the writer has taken a deep interest in vital statistics, and has kept, or caused to be kept, a systematic necrological record. He has also noted in connection with the death-rate the concurrent prevailing diseases, and studied them in their relations to meteorological phenomena and also with regard to race, and the habits, mode of living, religion, and morals of the people generally.

The prevailing diseases of Pensacola from the 1st of January to April 30, 1880, may be put down in the order of their frequency or greater prevalence: Firstly, affections of the mucous surfaces, especially of the air passages, namely, bronchitis; influenza; pharyngitis, associated frequently with tonsillitis; laryngitis (croup); gastro-intestinal disorders. Secondly, hemorrhagic affections, as menorrhagia, which occurred so often as to attract the attention of physicians generally; epistaxis, and purpura hemorrhagica. Frequent abortions have been noticed. Acute diseases of the parenchymatous organs were rare, whereas chronic affections of the lungs, liver, and kidneys, also of the bladder, were aggravated. The fatal tendencies of phthisis pulmonalis were hastened. Consumption rarely occurs among the natives of Pensacola, and even when hereditary is slow to develope or remains dormant for a long period. Several native families, born of parents who died of phthisis, are now living who have passed the meridian of life, and still enjoy apparently good health. Among the "freedmen," or those who were formerly slaves, consumption is now common, whereas before the war between the States it was rarely met with. This is doubtless owing to the change in the mode of living, dissipation, vice, indiscriminate and illicit sexual intercourse, and a residence in low, filthy, unventilated habitations. Many, however, of the colored race emulate the best classes of the white population in the attainment of the comforts, conveniences, and luxuries of life, as well as a high moral and social standing among themselves, and therefore escape the ills that afflict the unfortunates above mentioned.

Although the atmosphere of Pensacola is more humid than that of some other places in Florida, many strangers who resort here for the restoration of their health realize a gradual and apparently permanent recovery. Persons in the incipient stage of consumption, for example, commonly recover sooner or later, but those whose lungs have begun to disintegrate, or who are in the more advanced stages of the disease, as a rule, get worse, and early succumb. Their native place, wherever it may be, is the best place for all such invalids.

The following meteorological summary, kindly furnished me by the observer of the United States signal office at Pensacola, Sergeant Robert R. Martin, together with remarks on ozone, and the tabular statement of the mortality in Pensacola annexed, will afford interesting study in connection with the diseases that prevailed concurrently with the jottings of the meteorological observer and vital statistician:

Meteorological summary, 1880.

Month.	Barometer.				Temperature.						Monthly mean humidity, per cent.	Average cloudiness, in fourths.	Rainfall, in inches and hundredths.	Prevailing wind.
	Monthly mean.	Highest.	Lowest.	Range.	Monthly mean.	Highest.	Lowest.	Range.	Daily range. Greatest.	Daily range. Least.				
					°	°	°	°	°	°				
January*	30.169	30.417	29.751	0.666	60.4	73	49	33	21	2	80.3	2.0	0.95	E.
February†	30.198	30.553	29.594	0.959	58.2	76	36	40	21	3	74.7	2.3	3.19	N. E.
March‡	30.106	30.350	29.863	0.487	65.8	79	40	39	26	5	74.4	1.9	5.99	N. E.
April§	30.121	30.460	29.942	0.518	69.6	83	44	39	24	5	77.6	2.2	3.78	S. E.

* High temperature, deficiency of precipitation; no frost during month.
† Temperature above normal, deficiency of rainfall; frost on 4th.
‡ Temperature above normal; no frost during month.
§ Temperature and precipitation above normal; frost on 10th.

Mortality in Pensacola, Fla., for the four months from January 1, 1880, *to April* 30, 1880, *inclusive. Estimated population* 10,000.

Disease.	White.	Colored.	Total.	Remarks.
Atrophia senile	3	.....	3	This mortuary report includes deaths among the floating population, which is estimated at 1,500; the permanent or resident inhabitants being about 8,500. The vital statistics relating to public health, deaths by the hand of the assassin, by accident and suicide, ought to be excluded. Those indicated by an asterisk (*) were of the transient or floating population. In calculating the death-rate per 1,000 I exclude the death by contused wound (†), it being a case of homicide, which reduces the death-rate of Pensacola to 4 per 1,000 precisely, for four months.
Atrophia infantum	2	4	6	
Trismus nascentium	2	1	3	
Febris enteric	2	1	3	
Phthisis pulmonalis	3*	2	5	
Gastro-enteritis	2	.....	2	
Cholera infantum	2	1	3	
Peritonitis puerperalis	2	.....	2	
Natus mortuus	1	.....	1	
Congestio cerebral	1	.....	1	
Pneumonia	1	.....	1	
Colitis	3	1	4	
Cirrhosis*	1	.....	1	
Enteritis	2	1	3	
Vulnus contusio	1†	.....	1	
Morbus cordis	1	.....	1	
Apoplexio cerebralis	1	.....	1	
Total	30	11	41	

I have no doubt but that the meteorological conditions of the atmosphere, in which that very important element ozone played an active part as a factor, were influential in the production of the diseases and mortality which occurred during the same period.

Ozone taken into the system in excess increases blood pressure or vascular tension, augments tissue changes, and thereby tends to the production of local congestions resulting in various morbid states of

the system. So that while ozone is necessary to life, conservative of the healthful performance of the bodily functions, it becomes by excess powerfully destructive, and by deficiency lessens the oxidizing action of the air on noxious compounds, and thus favors the spread of epidemic zymotic diseases.

According to the observations of Schönbein, Watson, Ross, Fox, and others, ozone certainly has an influence on health and disease, and it should, therefore, be entitled to a place in the memoranda of the meteorologist. Observations made by myself, taken by Schönbein's test-paper, and compared with Prof. R. C. Kedzie's ozone scale, and studied in connection with prevailing diseases since 1876, have impressed me with the belief that ozone constitutes an active factor, when in excess, in the production of catarrhal affections and other morbid states of the body, as already indicated, and when absent possesses an important connection, negatively, with cholera and yellow fever, favoring their propagation and spread.

The quarantine at this port went into operation on the first instant and is to remain in effect till raised by the board of health. Dr. T. M. Leonard, the former incumbent, was appointed to take charge of the establishment. The quarantine, as conducted by Dr. Leonard during the preceding ten years, was a complete success, notwithstanding there was a lack of harmonious action between the officials and employés. The discriminating powers of the quarantine physician were too limited, and consequently vessels were detained, against his judgment, longer than were necessary, and fumigation was had recourse to in instances where that officer had good reasons to oppose or protest against it.

In 1873 yellow fever was brought to Pensacola by the ship Golden Dream, which had been quarantined for twenty-four days, and in the mean time cleaned out, fumigated, and whitewashed. The disinfecting process in this instance was a complete failure.

I am now fully convinced that Professor Gamgee's method of destroying contagion and infection in ships and in houses by refrigeration, &c., promises better success and at less cost than any other means that have ever been applied. That other means have succeeded, I have already publicly declared; but those means require much more time and money than that which the professor has proposed. Frost destroys infection diffused through the air, a fact universally admitted, and a low temperature kills it effectually in houses. It is much to be regretted that the appropriation made by Congress last year for the building of Professor Gamgee's refrigerating ship was not applied.

Dr. T. M. Leonard, quarantine officer, reports for the week ending June 26 the arrival of 7 vessels at quarantine. Of these, four received free pratique after examination; of the three detained none are reported as infected.

TARRYTOWN, N. Y., July 3.—Dr. N. H. Freeland, health officer, reports 4 deaths and 7 births for the month of June. The town is remarkably healthy, and free from epidemic diseases.

ABSTRACTS FROM CONSULAR REPORTS.

ANTWERP, BELGIUM.—United States Consul J. H. Steuart, in his report for the week ending May 22, states that small-pox has been increasing there for some time. There were reported for the week 108 cases and 38 deaths from small-pox; the authorities seem to pay no attention to the disease and clear bills of health are still issued.

BARBADOES, WEST INDIES.—The report of United States Consul W. H. Polleys for the month of April gives a total of 52 deaths in a population of 20,000, being at the annual rate of 31.2 per thousand. General sanitary condition is reported good.

BRADFORD, ENGLAND.—The report of mortality in this city for the year 1879 shows a total of 4,106 deaths in a population estimated at 191,046, giving an annual death-rate of 21.1 per thousand. This rate is lower than that of most other large manufacturing towns and 3.1 per thousand below the average in Bradford for six years past. Absence of extreme heat in the summer is regarded as the chief cause of the lessened mortality. The births in 1879 were 6,358, or at an annual rate of 32.7 per thousand, which was 5.9 below the mean of the previous six years.

CHRISTIANIA, NORWAY.—United States Consul Gerhard Gade, under date of May 31, forwards the following account of an outbreak of small-pox in Christiania:

The president of the board of health of Christiania, Dr. Bidenkope, has addressed the following communication to the newspapers of this city:

"An epidemic of small-pox, which however has not yet spread much, has broken out in Christiania during this month. As the reports given by the newspapers have been erroneous, I will here give a brief history of this epidemic.

"At the beginning of May a sick seaman arrived here in the steamer Reserve. He was taken to the Central Hospital, where on the following day he was observed to have an eruption, which was considered to be measles, and he was consequently removed to the hospital of Ankerlökken. During his stay there, however, the disease proved to be small-pox, and the patient was sent to the small-pox lazaretto. Meantime he had, at the hospital of Ankerlökken, given the disease to a nurse and to the physician; the latter, however, had it in a very mild form, and they were at once isolated at the small-pox lazaretto. The seaman had been taken sick at Memel, Prussia. During the days between the 12th and the 14th May, the small-pox again appeared, and now on eight persons, occupied at the paper-mills of Bensberg. The almost simultaneous outbreak of the disease proved that these eight persons were infected at the same time and from the same source, which could not possibly be other than the rags of the paper-mill. Five of the persons attacked (women) had been working in a room where the rags were sorted. In that room twelve persons in all were at work, and thus half of them became infected. The sixth of the persons attacked had been at work in the adjoining room. The seventh (a man) had also been occupied with the rags. No particulars can be obtained about the eighth person. These eight persons lived all in different houses in the suburbs of Rodelökken and Sagan, and the contagious disease, which develops in the patients before the eruption appears, might then have spread in eight different houses, which were in a locality thickly populated. Another patient (the ninth) was afterwards discovered. She, too, had been at work at the mill, but had left, probably fearing to become infected, and thus several days elapsed before any information of her illness was received.

"Under these circumstances it might be expected that more cases would appear when the usual time of incubation had elapsed, as proved to be the case, since four persons were subsequently attacked. All the patients (in all sixteen) have been taken to the small-pox lazaretto.

"So large an importation of infection, of which from the outset at least ten different sources for the spread of the disease had been formed, has hardly ever before been observed in Christiania. Efficient measures have, of course, been taken to prevent further spread of the disease, but it can be easily understood that a further spread is to be feared, and it is most probable that the next few days will bring some new cases. It is, however, to be hoped that we may succeed in confining the sickness within its present limits. The most efficient means for preventing it are, of course, next to isolation of the patients and a perfect disinfection, vaccination and revaccination."

[Here follows information about the several places where vaccination can be done under direction of the board of health.]

"There is another circumstance which deserves to be noticed, namely, the danger which arises from the stores of rags at the paper-mills, as not only infection from the small-pox, as in the present case, but other dangerous diseases, may be brought from one place to another, as typhus, exanthematic-typhus, dysentery, cholera, splenitis, and pest. Up to this time the present instance has fortunately been the only one in this country, but such cases are sometimes reported from abroad. The rags which have spread the infection were probably white rags, imported from Stettin, and one of the bales had probably contained linen used by small-pox patients.

"It would be rather difficult to prevent in the future importation of diseases through rags which may arrive from other parts of this country, and particularly from abroad. During great and dangerous epidemics, as of cholera, importation of rags from suspected places ought to be altogether prohibited."

GLASGOW, SCOTLAND.—The United States consul forwards the report of the health officer for the year 1879, from which it appears that the death-rate for the year was 23 per thousand, having varied from 16.6 in August to 31.7 in December. The mean death-rate for 1879 was 6 per thousand below the average of the ten years preceding, while the rate under 5 years of age was 28 per thousand lower.

LEEDS, ENGLAND.—The report of the health officer for the five weeks ending May 1 gives a total of 576 deaths, being at the annual rate of 18.8 per thousand. Among the causes of death were consumption 50, other lung diseases 109, scarlet fever 11, measles 7, and whooping-cough 8. There were 239 deaths under 5 years, or 41.5 per cent. of the total mortality.

MONTREAL, CANADA.—The United States consul forwards the reports of Dr. A. B. Larocque, health officer, for the first three months of 1880. The following items are noted: January—deaths, 310; under 5 years, 157; annual death-rate, 27.5 per thousand. Deaths from consumption 42, other lung diseases 38, small-pox 33, croup 7, diphtheria 7, scarlet fever 6, enteric fever 7, brain and nervous system 35, heart and circulation 13, and digestive system 12; premature births 5, accidental deaths 5. February—deaths, 343; under 5 years, 157; annual death-rate, 30.5 per thousand. Deaths from consumption 40, other lung diseases 59, small-pox 26, measles 16, croup 14, diphtheria 11, scarlet fever 3, enteric fever 4, brain and nervous system 54, heart and circulation 12, and digestive system 10; premature births 6, accidents 4. March—deaths, 330; under 5 years, 129; annual death-rate,

29.3 per thousand. Deaths from consumption 38, other lung diseases 47, small-pox 27, measles 20, diphtheria 15, croup 5, scarlet fever 5, brain and nervous system 41, heart and circulation 15, and digestive system 13; premature births 4, accidental death 1. The mean temperature for January was 22.4, February 19.9, March 22.1.

MOSCOW, RUSSIA.—The report for the month of January gives a total of 1,957 deaths in a population of 601,970, being at the annual rate of 39.0 per thousand. Among the causes of death noted are small-pox 12, enteric fever 114, other contagious diseases 178, digestive system 215, consumption 291, and other lung diseases 251.

NINGPO, CHINA.—United States Consul E. C. Lord sends reports for five weeks ending May 10. The usual diseases of large cities in temperate climates are noted, but no statistics can be obtained as to number of cases or mortality. The mean temperature was about 66°; the general sanitary condition is reported as good.

RIO DE JANEIRO, BRAZIL.—Under date of May 26, United States Consul Thomas Adamson forwards a letter (with translation) from Dr. Maximiano Marquez de Carvalho, setting forth the claims of a certain "prepared rosin" (or resin) as a specific for the prevention of yellow fever. He administers the resin by inhalation, and one application of the vapor is said to afford protection for a year. The Doctor claims by this means to have "extinguished in 600 houses the yellow fever which had previously appeared in them for 30 years consecutively."

SANTIAGO DE CUBA.—United States Consul J. C. Landreau, in his report for the month of May, records 76 cases of yellow fever, and 54 deaths; 102 cases of small-pox, with 52 deaths; and 16 cases of typhoid fever, with 8 deaths. The yellow fever and small-pox are said to be confined to the troops, and as no cases have occurred near the shipping, the consul continues to give clean bills of health to vessels bound for the United States. There were 241 deaths from all causes during the month, in a population of 40,000, being at the annual rate of 72.3 per thousand.

SHEFFIELD, ENGLAND.—During the four weeks ending May 8 there were 844 births, of which 440 were females; birth-rate, 36.1 per thousand. In the same period there were 537 deaths, the rate being 23 per thousand. Deaths from scarlet fever, 36; typhus and typhoid fevers, 18; diseases of respiratory organs, 45. Attention is called to the selling of newspapers by children, just convalescent from "fever," as a frequent means of spreading disease.

SINGAPORE.—United States Consul A. G. Studer reports for the month of April a total of 288 deaths. From "fever" 76, consumption 12, diarrhœa and dysentery 61, lung diseases 18, brain diseases 5, small-pox 3. No epidemic disease in the port. Of the decedents 3 were Europeans, 187 Chinese, and 61 Malays.

Under date of May 7, that the port and district are free from epidemic, infectious, or contagious diseases.

ST. JOHN, NEW BRUNSWICK.—The report of United States Consul D. B. Warner for the month of May gives a total of 61 deaths, but the causes are not stated, nor is any estimate of population given. No contagious diseases are reported.

ST. PETERSBURG, RUSSIA.—United States Consul W. H. Edwards reports 759 deaths for the week ending May 15; of this number 507 were males and 252 females. There were 155 deaths from typhus fever, and 119 from consumption; still births 26, accidents 11, suicides 4.

For the week ending May 22, deaths 689, rate 53.8; typhus 127, diphtheria 10, consumption 123, 43 still born, 6 accidental, 3 suicides.

For the week ending May 29, a total of 719 deaths in a population of 667,000, being at an annual rate of 56.2 per thousand. There were 166 deaths from typhus fever, 109 from consumption, and 113 from other lung diseases, 3 suicides, 6 accidental deaths, and 25 still-births are reported.

VALPARAISO, CHILI.—United States Consul L. H. Foote reports for the month of April 393 deaths, of which 63 were from small-pox; the disease is now rapidly decreasing. The annual death-rate was 46.6, the population being estimated at 101,100; the city is unclean and badly drained.

YOKOHAMA, JAPAN.—Dr. Thomas H. Streets, United States Navy, reports for the month of May 88 deaths from all causes. The native papers continue to report isolated cases of cholera in various parts of the empire, but Dr. D. B. Simmons, of the Kanagawa Ken Hospital, is inclined to doubt the correctness of diagnosis of the Japanese physicians in calling the cases true cholera.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 26, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	36,400	3	13	18.6	6	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
N. H .... Concord	14,000	.....	4	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Mass .... Boston	375,000	44	122	16.9	21	1	10	6	2	.....	.....	.....	9	1	2	.....	1	32	6
Cambridge	50,400	2	16	16.6	9	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
New Bedford	27,000	6	12	23.1	1	.....	1	2	.....	.....	.....	.....	1	.....	.....	.....	.....	4	1
Newburyport	13,800	1	4	15.1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Marblehead	7,500	1	5	34.7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fall River	48,680	7	28	30.0	4	.....	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	6,334	1	3	24.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence	39,000	6	11	14.6	1	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....
Lowell	54,000	12	28	24.3	4	.....	4	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	5	1
Lynn	37,000	3	10	14.1	1	.....	.....	1	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Brockton	13,000	.....	1	3.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,500	5	7	16.2	.....	.....	4	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Milford	10,000	.....	1	5.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	1	4	18.9	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	23,500	2	7	15.5	3	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
Springfield	31,500	4	15	24.8	1	.....	.....	5	.....	1	.....	.....	1	.....	.....	.....	.....	7	.....
R. I ..... Providence	104,500	9	26	12.9	5	.....	1	1	1	.....	2	.....	2	3	.....	.....	1	9	.....
Conn .... New Haven	60,000	13	28	24.3	4	.....	5	.....	.....	3	.....	.....	2	.....	1	.....	1	10	1
New Britain	14,000	3	5	18.6	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,200	1	2	5.1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	.....	5	15.8	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,111,940	713	1,038	48.6	95	20	440	16	4	9	5	.....	70	7	13	.....	4	534	39
Brooklyn	564,448	289	414	38.2	27	4	167	12	3	5	5	.....	30	5	2	.....	3	211	16
Yonkers	20,000	5	8	20.8	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1
Poughkeepsie	21,000	2	6	14.9	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Newburgh	18,040	.....	6	17.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sing Sing	7,500	5	9	62.6	1	.....	2	.....	.....	4	.....	.....	.....	.....	1	.....	.....	.....	1
Utica	35,000	.....	4	5.9	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1
Rochester	90,000	3	22	12.7	3	.....	.....	1	.....	.....	.....	.....	2	1	.....	.....	1	3	.....
Binghamton	17,640	.....	2	5.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Buffalo	170,000	19	44	13.5	5	.....	7	2	.....	.....	1	.....	1	.....	.....	.....	.....	8	6
Seneca Falls	6,000	.....	1	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watertown	10,666	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	49	94	23.4	8	1	17	2	1	2	2	.....	4	2	3	.....	.....	.....	5
Newark	137,000	33	61	23.2	4	2	5	.....	1	1	.....	.....	3	.....	.....	.....	.....	15	3
Orange	12,000	4	6	26.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Plainfield	8,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	901,380	219	427	24.7	53	4	116	6	6	.....	6	.....	10	.....	.....	2	1	.....	.....
Erie	28,430	.....	1	1.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pittsburgh	153,880	62	82	27.8	1	.....	28	5	1	.....	4	.....	12	4	1	.....	1	15	.....
Del ..... Wilmington	44,000	21	47	55.7	6	.....	23	.....	2	.....	2	.....	2	1	.....	.....	.....	.....	1
Md ..... Baltimore	400,000	141	245	31.9	27	1	81	3	8	2	9	.....	5	.....	.....	.....	5	105	8
District of Columbia	170,000	71	117	35.9	15	.....	35	1	.....	2	.....	.....	6	.....	.....	.....	1	48	1
Va ..... Norfolk	26,200	9	18	35.8	.....	.....	4	1	.....	.....	2	.....	1	.....	.....	.....	.....	8	2
Richmond	80,000	29	59	38.4	3	.....	19	.....	1	1	.....	.....	3	1	.....	.....	1	21	.....
Lynchburg	21,000	5	11	27.3	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,000	5	7	21.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	16	32	29.2	4	.....	3	.....	.....	2	.....	.....	2	.....	1	.....	.....	.....	1
Ga ..... Augusta	27,000	8	14	27.0	2	.....	6	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Atlanta	41,548	6	10	12.5	3	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Rome	5,000	.....	1	10.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	12,000	.....	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	5	15	19.5	1	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Selma	7,070	4	7	51.6	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
La ..... New Orleans	210,000	50	115	28.5	20	.....	16	1	1	6	2	.....	4	4	1	.....	1	.....	.....
Shreveport	7,000	.....	3	22.3	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	22,000	3	7	16.6	1	.....	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	3	1
Brownsville	5,500	.....	1	9.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waco	9,000	1	4	23.1	1	.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	1	4	9.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....
Tenn .... Nashville	37,000	16	32	45.1	1	.....	6	.....	2	.....	.....	.....	1	.....	.....	.....	7	13	.....
Clarksville	6,000	3	7	60.8	1	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
W. Va ... Wheeling	32,000	7	15	24.4	.....	.....	4	1	.....	.....	.....	.....	3	.....	1	.....	.....	5	2
Ohio ..... Cincinnati	280,000	76	109	20.3	10	.....	39	3	.....	.....	1	.....	3	7	1	.....	.....	54	3
Cleveland	175,000	.....	65	19.3	2	.....	10	.....	1	.....	5	.....	2	.....	.....	.....	.....	.....	2
Dayton	39,000	4	11	14.7	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Gallipolis	5,500	1	2	18.9	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Evansville	40,000	7	16	27.8	2	.....	2	.....	1	.....	.....	.....	.....	4	1	.....	.....	.....	.....
Indianapolis	100,000	23	36	18.7	2	.....	8	.....	.....	1	.....	.....	1	.....	.....	.....	2	10	.....
Jeffersonville	10,500	1	3	14.9	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Richmond	14,000	3	9	33.5	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Ill ..... Chicago	500,000	181	268	27.9	16	13	87	12	4	2	6	.....	18	.....	4	6	3	127	6
Aurora	12,000	.....	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peoria	40,000	12	13	16.9	1	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	.....	6	20.8	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,500	.....	1	6.1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,500	.....	1	6.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	127,000	26	42	17.2	5	1	3	1	1	1	1	.....	5	2	.....	.....	2	11	1
Minn .... Saint Paul	.....	3	11	.....	2	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	2	2
Iowa .... Dubuque	30,000	.....	9	15.6	1	.....	4	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Keokuk	15,800	1	7	23.1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Mo ..... Saint Louis	500,000	113	177	18.0	12	.....	49	.....	3	3	2	.....	3	1	1	.....	3	71	2
Kans .... Lawrence	8,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	30,000	6	8	13.9	.....	.....	2	.....	1	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	4	6	12.5	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 26, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Cal .....San Francisco	305,000	24	75	12.8	17	1	3	1	.....	.....	.....	.....	5	.....	.....	.....	2	6	3
Sacramento	25,000	.....	3	8.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	14,000	3	4	14.9	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,500	.....	1	6.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,239,436	2,417	4,238	26.8	436	48	1,251	87	50	55	58	.....	235	46	33	8	43	1,388	125

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 121 white, 1 colored. Rate per 1,000, white 17.0, colored 10.4. Providence has 100,500 white, 4,000 colored; deaths, 25 white, 1 colored. Rate per 1,000, white 12.9, colored 13.0. Sing Sing has 7,250 white, 250 colored; deaths, 8 white, 1 colored. Rate per 1,000, white 57.5, colored 208.7. Wilmington, Del., has 38,000 white, 6,000 colored; deaths, 36 white, 11 colored. Rate per 1,000, white 49.4, colored 95.6. Baltimore has 343,715 white, 56,285 colored; deaths, 188 white, 57 colored. Rate per 1,000, white 28.2 colored 52.8. District of Columbia has 114,000 white, 56,000 colored; deaths, 60 white, 57 colored. Rate per 1,000, white 27.4, colored 53.4. Norfolk has 14,900 white, 11,300 colored; deaths, 10 white, 8 colored. Rate per 1,000, white 35.0, colored 36.9. Richmond has 46,000 white, 34,000 colored; deaths, 24 white, 35 colored. Rate per 1,000, white 27.2, colored 53.7. Lynchburg has 10,000 white, 11,000 colored; deaths, 5 white, 6 colored. Rate per 1,000, white 26.0, colored 28.4. Wilmington, N. C., has 6,714 white, 10,286 colored; deaths, 2 white, 5 colored. Rate per 1,000, white 15.5, colored 25.3. Charleston has 25,000 white, 32,000 colored; deaths, 11 white, 21 colored. Rate per 1,000, white 22.9, colored 34.2. Augusta has 16,176 white, 10,824 colored; deaths, 7 white, 7 colored. Rate per 1,000, white 22.5, colored 33.7. Atlanta has 25,373 white, 16,175 colored; deaths, 4 white, 6 colored. Rate per 1,000, white 8.2, colored 19.3. Mobile has 28,000 white, 12,000 colored; deaths, 5 white, 10 colored. Rate per 1,000, white 9.3, colored 43.4. Selma has 3,082 white, 3,988 colored; deaths, 7 colored. Rate per 1,000, colored 91.5. New Orleans has 155,000 white, 55,000 colored; deaths, 71 white, 44 colored. Rate per 1,000, white 23.8, colored 41.7. Shreveport has 3,500 white, 3,500 colored; deaths, 2 white, 1 colored. Rate per 1,000, white 29.8, colored, 14.9. Nashville has 26,000 white, 11,000 colored; deaths, 16 white, 16 colored. Rate per 1,000, white 32.1, colored 75.8. Clarksville has 3,000 white, 3,000 colored; deaths, 3 white, 4 colored. Rate per 1,000, white 52.1, colored, 69.5. Total white population, 1,336,210; total deaths, 598; annual rate per 1,000, 23.3. Total colored population, 340,702; total deaths, 298; annual rate per 1,000, 45.6.

The following reports, for the week ending June 26, are from places requiring burial permits and having less than 5,000 population:

Bridgewater, Mass., 4,000; no deaths. Brunswick, Ga., 3,000; no deaths. Edgartown, Mass., 1,400; one death. East Haven, Conn., 1,200; no deaths. Morgan City, La., 2,500; consumption 1. Murfreesborough, Tenn., 3,500; deaths 2. Saint Augustine, Fla., 2,500; old age 1. Shelbyville, Tenn., 2,000; no deaths. Total population, 20,100; deaths, 5; annual rate per 1,000, 12.9.

The following reports, for the week ending June 26, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; under 5 years, 4; diarrhœa 3, diphtheria 2. Allegheny, Pa., 75,000; deaths, 34; under 5 years, 20; diarrhœa 13, diphtheria 1, scarlet fever 1. Batesville, Miss., 700; no deaths. Bath, Me., 10,000; deaths 2; consumption 1. Boulder, Colo., 3,500; consumption 1. Calais, Me., 7,000; consumption 2. Cambridge, N. Y., 1,900; deaths 3; diphtheria 2. Carrollton, Miss., 600; no deaths. Chatham, Conn., 3,000; no deaths. Circleville, Ohio, 6,400; two deaths, under 5 years. Clinton, Mich., 1,200; no deaths. Columbus, Ga., 9,000; deaths, 2; consumption 1. Corinth, Miss., 2,300; no deaths. Cumberland, Md., 12,000; deaths, 8, under 5 years 5; diarrhœa 5. Dallas, Tex., 20,000; deaths, 8; under 5 years 6; diarrhœa 2, enteric fever 1, whooping-cough 1. Davenport, Iowa, 27,000; deaths, 2; consumption 1, scarlet fever 1. Decatur, Miss., 1,000; enteric fever 1. East Saginaw, Mich., 1,900; deaths 2. Fayette, Miss., 300; no deaths. Flint, Mich., 10,000; measles 1. Gunn City, Mo., 125; no deaths. Huntingdon, Tenn., 850; no deaths. Indianola, Tex., 900; no deaths. Iuka, Miss., 1,000; one death. Jefferson, Tex., 3,250; deaths, 5; under 5 years, 4; diarrhœa 1, puerperal 2. Kenosha, Wis., 5,000; one death. Lansingburg, N. Y., 7,150; diarrhœa 2, under 5 years. Lebanon, Pa., 9,000; deaths, 2; under 5 years 1; pneumonia 1. Little Falls, N. Y., 6,000; one death. Louisiana, Mo., 5,200; deaths, 4; under 5 years, 1; consumption 2, diarrhœa 1. Madison, Ind., 12,000; deaths, 5; under 5 years, 3; consumption 1, diphtheria 1. Marquette, Mich., 4,800; one death. Martinsburg, W. Va., 6,200; deaths, 4; under 5 years, 3; diarrhœa 3. Milledgeville, Ga., 4,000; deaths, 2; under 5 years 1; malarial fever 1. Mount Pleasant, Iowa, 5,000; no deaths. Muscatine, Iowa, 7,500; deaths, 3; consumption 1, pneumonia 1. Muskegon, Mich., 13,000; deaths, 7; under 5 years, 2; diphtheria 1, malarial fever 3. Natchez, Miss., 10,000; deaths, 4; under 5 years, 1; diarrhœa 1, malarial fever 1, old age 1. Nebraska City, Nebr., 5,200; consumption 1, under 5 years. Ocala, Fla., 1,000; no deaths. Oshkosh, Wis., 18,000; deaths, 4; consumption 2, old age 1. Painesville, Ohio, 5,000; one death. Phœnixville, 6,000; measles 1, under 5 years. Pleasant Hill, Miss., 250; no deaths. Pontotoc, Miss., 600; no deaths. Port Gibson, Miss., 1,400; no deaths. Port Jervis, N. Y., 10,000; deaths, 2; under 5 years, 1. Pulaski, Tenn., 2,100; diarrhœa 1. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., deaths, 5; under 5 years, 2; no population given. Rockland, Me., 7,000; deaths, 3; under 5 years, 1. Santa Cruz, Cal., 5,000; one death. Springfield, Ohio, 23,000; deaths, 11; under 5 years, 8; consumption 1, diarrhœa 8. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 3. Tampa, Fla., 1,200; no deaths. Titusville, Pa., 9,000; consumption 1. Victoria, Tex., 3,500; two deaths. Wesson, Miss., 2,000; no deaths. Youngstown, Ohio, 17,000; deaths, 3; consumption 2. Total population, 439,979; deaths under 5 years, 67; total deaths, 141; annual rate per 1,000, 16.7.

ADOPTION OF RULES AND REGULATIONS.

Extracts from the minutes of the board of health, Hancock County, Mississippi.

At a meeting of the board of health for Hancock County, State of Mississippi, held June 21, 1880, at Bay Saint Louis, the following rules relative to quarantine were adopted, viz: 1st. No vessel coming from any infected port will be allowed to enter the port of Shieldsborough (Bay Saint Louis) without the proper certificate from the physician of the National Board of Health at Ship Island.

2d. All vessels arriving within the waters of Hancock County from infected ports, without the proper certificate from the physician of the National Board of Health at Ship Island, will be compelled to proceed there without delay, and report to the physician in charge, to be cleansed and disinfected. These rules to be in force until the 1st day of November, 1880.

On motion, it was resolved that the president of the board be required to visit each and every vessel arriving from any infected port, and act in accordance with the rules and regulations heretofore adopted.

INSPECTORS' REPORTS.

NEW ORLEANS, LA.—Dr. C. A. Rice reports for the week ending June 20, the inspection of 15 steamboats, 7 barges, 1,292 persons. Tonnage 13,143. Average condition good. Trains inspected 31. One thousand four hundred and eighty-nine boxes fruit direct from Sicily passed for Memphis, which city excludes only tropical fruits.

For the week ending June 28, the inspection of 19 steamboats, total tonnage 16,022, and 10 barges. Total number of persons 1,454. Average condition of boats and barges good. In the railway-inspection service there were 33 freight trains inspected. No suspicious cases are reported in the city.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	92	..	1	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	11	..	87
Albany Hospital	Albany, N. Y	do	125	54	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..	4	..	..	..	..	..	..	..	..	11	12	..	53
Emigrant Hospital	Ward's Island, N. Y	do	456	53	4	1	2	1	..	..	..	..	..	..	..	10	..	..	..	5	..	..	..	3	..	..	..	1	..	..	..	1	..	..	2	..	2	..	14	..	..	..	1	..	..	5	3	2	53
German Hospital	New York City	do	90	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hart's Island Hospital	Hart's Island, N. Y	do	300	202	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	..	202
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	*13	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	5
Rochester City Hospital	Rochester, N. Y	do	125	64	1	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	7	10	1	60
Saint Mary's Hospital	do	do	320	230	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	9	7	..	232
Saint Barnabas Hospital	Newark, N. J	do	45	29	1	..	..	4	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	..	28
Saint Michael's Hospital	do	do	..	127	2	..	..	8	..	..	..	..	2	1	..	1	..	..	..	..	..	..	..	..	2	1	..	12	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	24	17	1	133
Germantown Hospital	Germantown, Pa	do	25	24	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	5	..	23
Homeopathic Hospital	Pittsburgh, Pa	do	40	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	4	..	24
Freedmen's Hospital	Washington, D. C	do	300	239	3	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	4	..	1	..	1	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	27	25	3	238
Providence Hospital	do	do	160	113	1	..	2	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	4	..	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	14	3	117
Georgia Infirmary	Savannah, Ga	do	50	37	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	33
Saint Mary's Hospital	Galveston, Tex	do	300	85	1	..	..	6	..	..	..	..	2	1	..	4	..	..	..	..	..	..	..	..	4	2	..	4	..	..	..	..	1	1	..	3	..	..	..	..	..	..	..	..	17	17	1	84
Cincinnati Hospital	Cincinnati, Ohio	do	500	283	5	4	..	4	..	..	..	..	2	..	..	3	..	..	..	..	..	..	..	..	3	1	..	7	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	70	62	2	291
Saint Luke's Hospital	Detroit, Mich	do	25	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	12
City Hospital	Saint Louis, Mo	do	411	216	1	2	3	18	..	..	..	..	4	6	2	17	..	..	..	..	1	..	1	..	3	6	..	10	..	..	..	..	4	1	2	3	..	..	..	..	..	..	..	..	54	58	11	201
Saint John's Hospital	do	do	75	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	16
Saint Louis Hospital	do	do	250	71	..	..	2	6	..	..	..	..	2	..	1	1	..	..	..	..	..	..	..	..	6	6	..	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Naval Hospital	Chelsea, Mass	do	..	14	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	15
Do	Brooklyn, N. Y	do	115	45	1	..	..	4	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	..	4	..	..	1	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Do	Washington, D. C	do	50	15	..	..	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	..	17
Do	Pensacola, Fla	do	20	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Riverside Hospital	New York City	Contagious diseases	150	6	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	2	..	..	..	..	..	1	..	2	4	3	..	7
Municipal Hospital	Philadelphia, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	1	2	8
Nursery and Child's Hospital	New York City	Children	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	5	..
State Hospital for Women and Children	Philadelphia, Pa	Women and children	18	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	11
Children's Hospital	Washington, D. C	Children	72	41	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	4	2	41
Women's Hospital & Foundlings' Home	Detroit, Mich	Women and children	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	25
Women's Hospital of Illinois	Chicago, Ill	Women	19	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	17
Insane Hospital	Augusta, Me	Insane	400	405	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	7	..	405
New Hampshire Asylum for Insane	Concord, N. H	do	300	293	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	293
Boston Lunatic Hospital	Boston, Mass	do	200	164	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	163
State Lunatic Hospital	Worcester, Mass	do	650	500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	..	501
Retreat for Insane	Hartford, Conn	do	150	141	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	..	141
Hospital for Insane	Middletown, Conn	do	515	515	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	515
Hudson River State Hospital	Poughkeepsie, N. Y	do	..	249	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	11	1	243
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	..	1251	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	3	1	1256
Marshall Infirmary	Troy, N. Y	do	200	138	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	3	..	142
Willard Asylum	Willard, N. Y	do	..	1583	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	3	1	1594
State Hospital for Insane	Danville, Pa	do	700	474	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	8	1	468
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	500	579	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	1	579
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	389	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	*	1	394
E. L. Asylum	Williamsburg, Va	do	335	328	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	330
North Carolina Insane Asylum	Raleigh, N. C	do	..	283	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	283
Alabama Insane Hospital	Tuscaloosa, Ala	do	420	408	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	2	406
Lunatic Asylum	Jackson, Miss	do	425	5	..	..	3	..	..	..	..	..	5	4	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
State Lunatic Asylum	Austin, Tex	do	..	359	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	1	359
Michigan Asylum	Kalamazoo, Mich	do	..	651	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	650
Minnesota Hospital for Insane	Saint Peter, Minn	do	..	665	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2	..	668
Insane Asylum	Saint Louis, Mo	do	329	332	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	329
Insane Asylum of California	Stockton, Cal	do	1117	1118	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1117

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	June 19	2	20.9													60
Prince Edw'd Isl'd	Charlottetown	12,000	June 19	1	4.3			2										55.1
Canada	Kingston	16,000	June 26	25	81.5													69.6
Hayti	Port au Prince	30,000	June 9	27	46.9													82
Do	do	30,000	June 16	9	15.7													80
Do	Aux Cayes	9,000	June 5	7	45.7													77
Do	do	9,000	June 12	4	26.1													78
Trinidad	Port of Spain	30,000	May 8	24	41.7								1					
Do	do	30,000	May 5	25	43.6								1					
Do	do	30,000	May 22	9	15.7													
Aspinwall	Colon	3,000	June 19	5	86.9													85
Mexico	Acapulco	3,500	June 12	2	29.8													84
Brazil	Bahia	135,000	May 8	77	29.5				1		2							
Do	do	135,000	May 15	82	31.4				1				1					
Do	do	135,000	May 22	83	31.8						1							
Do	do	135,000	May 29	79	30.3				1		1		1					
Do	do	135,000	June 5	84	32.2				1						1			
Do	Pernambuco	126,575	May 9	101	41.6				1		7		1		2			
Do	do	126,575	May 16	77	31.7				4		10							
Do	do	126,575	May 23	72	29.7				1		8		3					
Do	do	126,575	May 30	66	27.2						3		1					
Do	do	126,575	June 6	93	38.3				1		4		3					
Teneriffe	Santa Cruz	16,610	June 5	9	28.3							6						68
Ireland	Belfast	230,000	June 19	116	33.1					3		20	2			9	1	49.3
Do	Dublin	314,666	June 19	237	39.2						14		3		4		32	
Do	Queenstown	10,000	June 19	7	35.3													
Scotland	Leith	58,479	June 19	23	20.4												4	55.1
Do	Dundee	155,100	June 12	93	31.3							1		2	1	10	1	51.7
England	London	3,664,149	June 12	1,294	18.4						10		11				158	
Do	Sheffield	304,938	June 19	130	22.2													55.2
Do	Newcastle	148,000	June 12	52	18.1												3	52
Do	Tunstall	149,168	June 12	43	15.0								1					
Do	Bristol and Clifton	213,500	June 5	97	23.7								2				14	50
Wales	Cardiff	82,364	June 19	35	22.9												9	50.7
France	Paris	1,988,800	June 10	1,089	28.6						50		32				135	
Do	Havre	92,068	June 12	52	29.5													56
Do	Rouen	104,902	June 19	51	25.4													
Switzerland	Zurich	22,103	June 12	10	23.6												1	
Do	Geneva	52,077	June 12	18	18.0												4	
Holland	Amsterdam	316,952	June 12	147	24.2										2		8	56
Do	Rotterdam	150,378	June 19	70	24.3											40		
Germany	Mannheim	50,500	June 19	22	22.7													64
Do	Frankfort-on-Main	128,000	June 12	43	17.5													64
Do	Berlin	1,087,500	June 5	691	33.0							14	7	1	1	148	83	57
Do	Hamburg	405,000	May 29	237	30.5												8	
Do	Breslau	276,000	June 5	154	29.0								2				14	56
Do	Brunswick	74,138	June 12	38	26.8								1		2			
Do	Barmen	95,000	June 12	63	34.5								2				7	59
Bavaria	Nuremburg	100,000	May 22	51	26.6												7	50
Do	do	100,000	May 29	53	27.7												6	61
Saxony	Dresden	218,000	May 29	127	30.4							1	1				14	62
Do	do	218,000	June 5	102	22.3							1	1				10	56
Do	Chemnitz	91,236	June 5	66	37.9												4	57
Do	Leipsic	150,836	June 19	57	19.7												5	63
Belgium	Antwerp	173,643	June 5	127	30.4					102	49	9	2				1	60.8
Do	do	173,643	June 12	93	22.3					93	31	12	1				1	66.2
Denmark	Copenhagen	235,234	June 1	109	24.2					2	1	7	2			9		56
Do	do	235,234	June 8	98	21.8					2		9	1			21		
Italy	Leghorn	97,963	June 19	58	30.9								1					70
Austria	Trieste	128,233	June 5	84	34.2					3	3							
Hungary	Buda-Pesth	333,551	June 5	263	19.3						6		6				2	
Russian Poland	Warsaw	357,169	June 5	167	25.9						3							61
Sweden	Stockholm	169,429	June 5	98	21.7										2		10	56
Norway	Christiania	116,800	June 5	46	20.5					6						9	1	
Spain	Seville	138,000	June 6	51	19.3						1						5	79
Do	do	138,000	June 13	76	28.7										2		10	73
Do	Cadiz	65,028	June 12	42	33.7													73
Do	Alicante	34,926	June 5	19	28.4						1							
Barbary	Tripoli	20,000	June 5	4	10.4													81.7
Cape Colony	Cape Town	35,000	May 31	26	38.8													62
Japan	Kobe	18,282	May 22	13	56.8													
Do	do	18,282	May 29	6	26.2													

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

National Board of Health

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CLIMATE AND DISEASES.

[By CLEVELAND ABBE, M. D.]

The following paper was read before the Convention on Vital Statistics, which met at the rooms of the National Board of Health, May 6 and 7. The diagrams and charts referred to in the paper are omitted here, not being convenient for publication in the BULLETIN.

I. Having been requested by the President of the National Board of Health to present a few remarks "on the possible relations between meteorological data and vital statistics, and especially on the graphical method of presenting this data," I have therefore given this subject some consideration, and by way of an introduction to your deliberations submit the following remarks and suggestions with much diffidence, as coming from one who can have no claim to being an expert in these matters. The subject, indeed, is by no means a new one, but possesses rather a very long list of authors and titles, to all which I need not now refer.

Now, I shall not pretend to review the literature of the subject or to review all our knowledge of the relations of meteorology to health, but I shall assume that we, to-day, desire only to consider how far the study of climate may be reasonably expected to assist the physician in determining the ultimate cause of diseases and in applying the remedy. I must, therefore, first speak of a few hazy and imperfect or wholly erroneous ideas that must be cleared away before we can decide what is at present demanded of us by way of observation, and what graphic or statistical methods are to be recommended. These erroneous views on the relations of climate and health may seem hardly worth combating, but you will see that they have been so extensively repeated by eminent writers that it may well be feared lest the search after the truth has been long delayed by such dissemination.

II. I will first remark that there certainly has for ages been prevalent an opinion that certain climates are beneficial to invalids, and the sick have been transported thither with good results. But in doing this it has all along been quietly implied, and by many well understood, that the beneficial effects were due not to the climate in itself but wholly to the influence on the patient of *a change of climate*, if not indeed to other wholly extraneous conditions, such as bathing, freedom from dust, malaria, &c.

The numerous geographical and statistical comparisons that have been collected by so many students of this subject have, so far as I have examined them, nothing in them to show conclusively that the annual average temperature, moisture, wind, pressure, cloudiness, sunshine, &c., have in themselves anything more than an infinitesimal influence upon health, disease, or death, and yet these statistical authors have frequently lost sight of the distinction between the effect of a uniform climate and of a very changeable one, or rather, to be more charitable, they found the statistical material at hand in a shape that rendered it too laborious or impossible to separate the changeable from the uniform.

As an illustration of this very common class of errors, I will quote from a well-known author (Dr. Fox, of London), who, in his little pamphlet on the humidity of the air of Scarboro, formulates the connection between humidity and health, as follows:

First. A preternaturally dry air, with a high temperature, is apt to give origin to fevers and intestinal disorders.

Second. A very moist atmosphere, accompanied by a low temperature, predisposes to bronchial and rheumatic affections.

Third. A very dry atmosphere, when associated with a low temperature, excites inflammations of the respiratory organs.

Fourth. Humid climates and excessive rainfall, by producing a damp, foggy, relaxing climate, exert an injurious influence on the health, depressing the nervous system and checking the cutaneous and pulmonary exhalations.

Fifth. Abundant rainfall diminishes cholera, diarrhœa, and typhoid fever.

These and similar statements, illustrate the difficulty of our subject, and show how easy it is to confound causes, effects, and concomitants.

There certainly is not one of the preceding five propositions but is negatived by the common experience of the residents of the United States.

First. The dry air of our driest regions is universally extolled for its healthy, invigorating qualities; and intestinal disorders, if they prevail, are attributed to the drinking water, and not to the atmosphere.

Second. Rheumatism and bronchial troubles are in the minority in very warm, moist climates, such as our own Gulf coast, and if they prevail in New England, are attributed to the sudden daily changes in the weather, and very, very often to heredity.

Third. The dry, cold winter air of Minnesota and Manitoba is borne with impunity and pleasure by every one accustomed to it, and the inflammations of the lungs that occur there have always other and special causes.

Fourth. Humid climates may be and are depressing to those accustomed to a dry climate, but in the natives of Iceland, the Hebrides, Orkneys and Shetlands, Bermudas, Bahamas, and the islands of the Pacific and Indian Oceans, we behold races of men who have not yet been shown to be peculiarly subject to nervous, cutaneous, or pulmonary disorders.

Fifth. The diminution of cholera, diarrhœa, and typhoid fever during rainy seasons, if it be a fact, is more likely to be a secondary effect, due to the more abundant washing and drainage, rather than to any direct influence of rainfall upon the human body; and the diminution is, moreover, largely balanced by the fact that excess of rainfall often operates, by causing overflow of cisterns, to spread the germ of these diseases throughout large masses of otherwise innocuous drinking water.

By these remarks, I would not be misunderstood, but represent that the average annual temperature, moisture, &c., whatever indirect effects they may have—and these must be conceded by every one—have little or no direct bearing upon the prevalence of any special disease. Perhaps the best proof of this proposition, if it need any, is found by comparing the climates of those regions in which certain diseases are rare, with the records of other regions in which those same diseases are frequent. This I need not do in detail, for the peculiarities of many diseases have come to be so well known that instances will crowd upon your memory to show that neighboring localities, having precisely the same meteorological climate, are in one case exempt, and in the other frequented by given diseases. The fact is, that human beings are capable of becoming acclimated to any uniform condition of the atmosphere, and of living long, healthy lives either on high, dry, sunny plateaux, or on low, damp, foggy seashores; but this vital power of adjustment to our surroundings is very severely tried when at any place we experience *sudden changes* in the atmospheric condition, and it is *then* that the physiological system proves inadequate and becomes disordered.

III. The sudden changes to which I refer are not the gradual and regular annual changes, but they are irregular, or non-periodic changes; and here at once I have to say a few words in reference to another class of very laborious statisticians. Of these, I may take, as a prominent example, the Medico-Climatological Committee of the Scottish Meteorological Society, of which Dr. Arthur Mitchel, of Edinburgh, is the chairman. Dr. Mitchel, with the assistance of Buchan, the well known meteorologist, has published most elaborate tables, embodying the results of years of labor in studying the weekly mortality returns for London for the thirty years, 1845 to 1874, inclusive. (See The Influence of Weather on Mortality, Jour. Scot. Met. Soc., Feb., 1875, vol. 4, page 185; The Mortality of the large towns of the British Islands, vol. 4, page 307; The Mortality of New York and London Compared, *ibid*, 1878.)

In the first of these papers the authors state "that the primary object of the inquiry is to investigate the seasonal influence of climate on death-rate from different diseases." They accordingly give both in tabular, and in graphic form, the numerical distribution, by weeks, throughout the year, of deaths from different diseases, or from special groups of diseases, as also the deaths of old, and of young, and of male, and of female; they analyze minutely the mortality returns for London, and collate with these, by tables and curves, the mean temperatures, humidity, &c., for thirty years. In the accompanying diagrams, Nos. 1 to 6, I have reproduced some of their results.

You will notice upon these diagrams many remarkable coincidences, all of which have been fully dwelt upon by our authors, and which constitute a very complete description of the parallel courses taken by mortality and climate. But such a descriptive process does not possess any of the characteristics of an investigation into the influence of climate on the death rate, nor does it give the least positive proof of the actual effect of any such influence. In fact, the authors start with the assumption that there is such an influence;

they put the data at hand into perspicuous graphic shape; call attention to some remarkable coincidences, and there suddenly stop, leaving it for others to show that the data prove or disprove the original working hypothesis.

But, inasmuch as our health is affected no more by what the skin feels, than by what the stomach drinks and eats, or the lungs breathe, and as these two additional modes of imbibing disease and death also are subject to seasonal changes parallel to the meteorological phenomena therefore the statistical student must first show us how to separate one influence from the other better than he has hitherto done, if he would succeed in adding to our positive knowledge of the causes of disease and death.

For example, we see conspicuous, the great mortality of children under five years of age culminating the first week in August, and due only to diarrhœa, and about eighty per cent. of which is confined to infants under one year. Now, what proof is offered that this is due to the extreme heat of those weeks in London in face of the other equally important factors such as acid fruit, unripe fruit, soured milk, tainted milk and food, spore dust in the atmosphere, and other causes, all which have their culmination and maximum influence, almost exactly simultaneously with each other, and with the temperature? and yet our authors boldly state, on page 230, "it is not cold, but heat which is the great destroyer of the infant life of London." The utter want of logic, the perfect *non sequitur* of this conclusion is but little ameliorated by the fact that on the next page the authors do allow that the influence of food and nursing needs to be investigated.

The fallacy of such conclusions is revealed at once if we supply the omitted premise, and the reasoning would stand thus:

Diarrhœa prevails in hot weather.

Every other conceivable cause has been examined and proven to be harmless.

Therefore heat causes diarrhœa.

Certainly no one will be found to maintain the truth of the premise that we have here had to supply.

More guarded is the similar remark, on page 50, of the report for 1872 of the board of health of Philadelphia, where, under the heading of "Causes of death from cholera infantum," we read as follows: "In the development of cholera infantum a high degree of temperature and excessive humidity act as powerful predisposing causes." But when the authors add, "We are not at a loss in assigning the reason for the exceptional increase in the death-rate of this disease, when we consult the meteorological observations for the year," we cannot but wish that they would more clearly show us whether the oppressive heat does not affect the mother and the child's food far more than it does the babe directly. They probably meant to say that the CHANGE FROM SPRING TO OPPRESSIVE SUMMER WEATHER, which was remarkably severe in 1872, induces the predisposition to diarrhœa, but even in this shape we see no reason to accept the statement as logical conclusion. In fact, I dare to say that the meteorological statistics prove clearly that great mortality from *cholera infantum* does not always or necessarily prevail in hot weather, so that the conclusion that heat causes diarrhœa absolutely loses both of its supporting premises and falls flat to the ground.

For instance, examine the unprecedented mortality from cholera infantum, as given in the Philadelphia report for 1872, and as reproduced in the accompanying diagram, No. 7. This diagram shows also the curves of the daily maximum and minimum temperatures for the Washington Naval Observatory, which will not differ greatly from the curves for Philadelphia, for which I have not the necessary data at hand at the moment of writing. The first feature that strikes the student is the maximum mortality of July 6 and 13. Next comes the fact that the equally hot or hotter periods in May 6–12, June 6–14, August 7–15, and 17–27 and September 6–10, were not attended by any special increase, but rather a very decided decrease or absence of cholera infantum, whence we can infallibly conclude that high temperature has, in itself, very little direct influence on the disease, and this becomes clearer when we reflect that the actual mortality occurs always some time after the disease has taken hold upon the child, and that the maximum mortality of July 6 occurred two weeks after the remarkable sudden fall of temperature that is shown to have occurred on June 22 and 24. I must maintain, therefore, that it is a perfectly plausible hypothesis that the sudden change from hot to cold on that date was the cause of many infants or their mothers taking cold, which settled in the bowels, and that the disease ran along with no more than the ordinary mortality, until the sudden increase of heat on July 6 caused the mothers to yield to the temptation of a change of diet from one of animal food and ripe vegetables to one of fresh vegetables and fruit, a change that assuredly always affects the babe far more than the direct influence of the temperature. Why will not some one compare the statistics of cholera infantum with the daily sales of cherries, cucumbers, green apples, &c.? I predict some very important coincidences will be revealed.

I may remark that the diagram here given shows also the minimum temperature of each day, but as the babe is usually well protected against the cold of early morning, and is exposed to the free air only during the warmer part of the day, it is evidently proper for us, in this case, to confine our attention to a comparison of the curve of mortality with that of maximum temperature.

IV. I therefore repeat the conclusion previously given in this paper, that these masses of statistics do not prove that the average annual temperature, or the regular seasonal variations from mid-winter to mid-summer, have any direct effect on human health, but only show that there is for each disease a systematic periodicity; the causes of this periodicity, as it seems to me, can never be revealed by any such simple statistical processes. And yet it is the cause and the remedy that is the great object of our search, and we meet to consider the question how far the results of statistical comparison between weather and disease justify further labor in that line, or whether they point towards other lines of research.

On this question I will not long detain you with reasonings, but will directly express my own convictions in the following sentence: The students of climatological statistics have as yet proved nothing as to the origin, cause, or prevention of disease; it is only by studying the minute details of irregular sudden daily changes that we can hope to demonstrate the direct influence of the atmosphere, or to show those geographical regions to which, in a very limited class of diseases, patients may be advantageously sent for a beneficial change.

V. Since, therefore, our studies of climate and disease give us no satisfactory answer to the questions that we have at heart, we perceive that we must pursue a very different line of investigation. We must first inquire of the experimental students of human physiology as to the cause of disease, and as to what climatological features are of importance, and then turn to the meteorological records to find them, if we can—not to take the monthly averages that the meteorologist has prepared for his own special use.

I find that the following purely climatic considerations are the principal ones that experience and experiment have shown to directly affect the human system after it has once become acclimated to any given conditions:

1. Long-continued extreme hot weather, with light winds and calms, producing nervous debility.
2. Long-continued extreme moisture, checking perspiration and throwing back into the system the heat that would have been absorbed with evaporation.
3. Sudden changes from cool to hot.
4. Sudden changes from hot to cold.
5. Sudden changes from dry to moist.
6. Sudden changes from moist to dry.

In addition to these changes, those also from high to low or from low to high pressures are shown by many investigators to have probably a decided effect upon the organs of breathing.

In general, these six or eight conditions reduce to two or four, as most climates unite the change from cold to hot with the change from moist to dry, or *vice versa;* and in general, the atmospheric changes here specified determine the direct effect of the weather upon human health; and if we would bring out quantitatively the actual bearing that these features have upon humanity, we must not hide them under a mass of mean monthly or annual temperatures and humidities.

VI. If it be considered desirable to especially determine these particular features of any climate, the apparatus would be of the simplest kind, namely:

1. A self-registering maximum thermometer.
2. A self-registering minimum thermometer.
3. A maximum and minimum hygrometer; the hair or veneer hygrometer, having sliding indexes to record the extremes.
4. A self-registering maximum and minimum aneroid barometer, one having sliding indexes to record the extremes.

The observers' duties would consist in the record once a day, say at 9 p. m., of the indications of these instruments.

The statistician would then make out tables of the greatest range of temperature from the morning minimum to the afternoon maximum, and from the afternoon maximum to the next morning's minimum, together with any other items suggested by the physiological student.

VII. These items include, I believe, all the features of climate that directly affect human health, and the best method of presenting them in graphic form to the eye is simply a repetition of the maximum and minimum curves, illustrated by the diagram No. 7, or by a corresponding condensation from a daily into a monthly summary.

VIII. In conclusion, I must commend to your notice the well-weighed words of Dr. J. Shreiver, of Vienna, in a lecture on this subject in 1876, which, at my suggestion, has been translated, and made accessible to American readers, by Dr. Geddings, and in which the author maintains that we are wholly on the wrong path when we confine ourselves to comparing meteorological observations with medical statistics; and "that the term climate, which has been hitherto employed to denote a vague, indefinite specific, of which no rational account could be given, appears now as something infinitely clear and very simple, being in fact nothing more than pure air, uncontaminated by miasma, with no organic or inorganic substances, and one in which rain is not unduly deficient."

Note added in June, 1880.

The preceding paper deals only with the question of the direct influence of climate on health. It was not the author's intention at the present time to propose definite hypotheses in reference to germs or the numerous other indirect influences, but to show that certain

diseases mentioned by him, and probably many others not mentioned, must logically or, as he believes, reasonably be attributed to the direct action of climate; that, therefore, we must turn our attention more than ever to other sources of disease.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

OAKLAND, CAL., June 26.—Dr. E. H. Woolsey makes the following remarks on the value of reports from the public schools of absence on account of sickness:

In the NATIONAL BOARD OF HEALTH BULLETIN of June 12 (p. 407) you will observe that my report is the only one giving absentees from public schools on account of sickness. As far as I know this method of estimating the sickness of localities has not been hitherto introduced. Frequent unsuccessful attempts have been made to induce or compel physicians to report their cases; but from many causes the majority of physicians could not be induced to make such reports, and the data furnished by the few medical men who appreciate the importance of ascertaining the topographical ranges and limits of disease are far too meager to be of any practical importance or value, and such, I believe, has been the uniform result of all efforts in this particular direction elsewhere. Being anxious to locate the sickly districts of our city, in order to carry out effectively a projected sanitary reform where most needed, the method which we have adopted occurred to me the most reliable and the least troublesome in practical operation. This portion of the report always finds its way into the newspapers as a matter of local interest, and in this way is exerting a salutary influence and one which was unforeseen, viz., that of inspiring voluntary efforts for reform. Like the publication of the mortality and the sanitary inspection of wards, it suggests that healthy localities and healthy soil and healthy houses are likely to become more desirable and command better prices.

The report of the sickness in the schools is furnished me by the school superintendent, he requiring the principals of the schools to include in their monthly reports to him the number of scholars taken sick during the month. Thus it will be seen that there is no difficulty in obtaining the required data, and these data must be universally regarded as more reliable and complete than could be obtained from any other source, and therefore form a safe and proper basis for an estimate of sickness.

While it is possible under this arrangement that some pupils are excused for feigned sickness, its workings are nevertheless uniform and equal and give results which accorded almost perfectly with the mortality and known sanitary and unsanitary conditions.

Now it is possible through the school department to obtain still further information in regard to the sickness of the different sections of the city. For example, the school superintendent might require reports from the principals, made out on blanks furnished by the health officer, giving the number sick from different diseases, duration, and result of illness. If this practice were general throughout the United States no objection could be raised, and it would doubtless meet with general favor and adoption, and would be productive of very valuable results.

YELLOW FEVER REPORTS.

NEW ORLEANS, LA.—A dispatch from Dr. S. L. Bemiss, member of the National Board of Health, dated July 11, reports one case of yellow fever on board the *Excelsior*, from Rio Janeiro. The case was at once removed to hospital, and the city is reported as healthy.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 3, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	36,400	.....	5	7.1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	.....	7	26.0	1	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	79	175	24.3	25	.....	33	8	2	.....	.....	.....	11	2	3	.....	2	51	13
Cambridge	50,400	11	24	25.0	1	.....	7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	8	1
New Bedford	27,000	5	11	21.2	2	.....	2	1	.....	.....	2	.....	.....	.....	.....	.....	.....	5	.....
Newburyport	13,800	1	5	18.9	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Marblehead	7,500	1	4	27.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	48,680	20	39	41.8	7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Plymouth	6,334	1	1	8.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Lawrence	39,000	7	17	22.7	3	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Worcester	52,000	14	25	25.0	4	.....	10	.....	.....	1	1	.....	1	1	2	.....	.....	.....	.....
Lowell	60,000	17	30	26.0	7	1	7	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	8	1
Lynn	37,000	3	15	21.1	6	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Brockton	13,500	1	3	11.5	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Holyoke	22,500	9	12	27.8	2	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Milford	10,000	2	3	15.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	1	3	14.1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1
Somerville	23,500	7	11	24.2	.....	.....	3	.....	.....	.....	.....	.....	2	1	.....	.....	.....	4	.....
Springfield	33,500	9	13	20.2	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Fitchburgh	12,600	1	3	12.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I ..... Providence	104,500	19	51	25.4	4	.....	5	.....	.....	.....	3	.....	8	.....	.....	.....	.....	8	5
Conn .... New Haven	62,000	25	43	36.1	2	1	17	1	1	1	1	.....	3	1	.....	.....	.....	1	.....
New Britain	14,000	2	6	22.3	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,200	1	10	25.8	3	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	1	5	15.8	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
N. Y ..... New York	1,111,940	863	1,297	60.8	92	13	626	18	4	6	8	.....	62	3	14	.....	9	723	65
Brooklyn	564,448	326	469	43.3	34	2	435	2	.....	9	4	.....	19	3	1	.....	2	275	11
Yonkers	20,000	4	5	13.0	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	3	.....
Poughkeepsie	21,000	3	5	12.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Newburgh	18,040	2	4	11.5	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Sing Sing	7,500	1	7	48.7	.....	.....	2	.....	.....	2	.....	.....	1	.....	1	.....	.....	.....	1
Utica	35,000	3	13	19.3	2	.....	1	.....	1	.....	.....	.....	2	.....	.....	.....	.....	1	1
Buffalo	170,000	12	32	9.8	7	.....	7	.....	1	.....	1	.....	2	.....	.....	.....	.....	11	2
Watertown	10,700	.....	6	29.2	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
N. J ..... Hudson County	209,000	104	146	36.4	8	.....	57	1	1	.....	2	.....	5	3	7	.....	.....	69	6
Orange	12,000	1	2	8.7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plainfield	8,000	1	5	32.6	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Pa ..... Philadelphia	901,380	368	609	35.2	48	3	225	7	2	.....	12	.....	10	.....	.....	1	5	.....	.....
Erie	28,430	2	2	3.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Pittsburgh	153,880	62	75	25.4	.....	1	29	3	1	.....	2	.....	4	4	.....	.....	3	13	2
Del ..... Wilmington	44,000	19	30	35.5	2	.....	2	1	1	.....	1	.....	.....	2	.....	.....	.....	.....	.....
Md ..... Baltimore	400,000	117	208	27.1	25	.....	73	2	5	2	5	.....	5	1	1	.....	3	80	6
District of Columbia	170,000	61	106	32.5	17	.....	24	.....	4	4	1	.....	4	.....	.....	.....	1	35	3
Va ..... Norfolk	26,200	9	18	35.8	1	.....	4	1	.....	.....	.....	.....	3	.....	.....	.....	.....	5	1
Richmond	80,000	31	52	33.9	4	.....	12	.....	2	.....	.....	.....	.....	.....	1	.....	3	17	.....
Lynchburg	21,000	4	9	22.3	3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
N. C ..... Wilmington	17,000	1	3	9.2	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	10	46	42.1	3	.....	7	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,000	4	14	27.0	3	.....	4	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	1
Atlanta	41,548	10	19	23.9	2	.....	4	.....	1	.....	.....	.....	3	.....	.....	.....	1	.....	.....
Rome	5,000	.....	1	10.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	6	15	19.5	1	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	2	.....
Selma	7,070	5	6	44.2	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....
La ..... New Orleans	210,000	49	112	27.8	10	1	24	.....	1	5	.....	.....	5	2	.....	.....	1	.....	.....
Shreveport	7,000	1	3	22.3	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex ..... Austin	16,000	2	5	16.3	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Antonio	22,000	3	9	21.3	1	.....	1	.....	.....	3	.....	.....	1	.....	.....	.....	.....	.....	.....
Brownsville	5,500	3	11	10.4	1	.....	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waco	9,000	.....	4	28.9	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	3	8	18.9	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	37,000	15	18	25.3	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	6	10	.....
Chattanooga	12,880	7	9	36.4	.....	.....	3	.....	.....	.....	.....	.....	1	2	.....	.....	.....	4	.....
Clarksville	6,000	2	2	17.3	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio ..... Cincinnati	280,000	49	105	19.5	13	.....	18	3	.....	.....	1	.....	9	8	3	.....	.....	34	3
Cleveland	175,000	.....	72	21.4	5	1	27	1	2	1	10	.....	2	1	.....	.....	.....	.....	.....
Dayton	37,000	16	19	26.7	1	.....	9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....
Gallipolis	5,500	.....	2	19.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Ind ..... Evansville	30,000	6	12	20.8	2	.....	4	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	1
Indianapolis	100,000	29	43	22.4	5	5	15	.....	1	.....	.....	.....	2	.....	.....	.....	4	.....	3
Richmond	14,000	4	5	18.6	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill ..... Aurora	12,000	.....	5	21.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peoria	32,780	10	18	28.6	1	.....	5	.....	1	.....	.....	.....	.....	2	.....	.....	.....	1	1
Jacksonville	15,000	2	3	10.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	2	2	17.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,000	1	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Wis ..... Milwaukee	127,000	29	43	17.6	4	1	4	1	.....	.....	.....	.....	4	2	.....	.....	.....	10	2
Beloit	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn .... Saint Paul	.....	7	11	.....	.....	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	6	1
Iowa .... Burlington	20,000	.....	16	41.7	.....	.....	3	.....	3	.....	1	.....	3	.....	.....	.....	1	1	2
Dubuque	30,000	.....	3	5.2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	15,800	2	2	6.6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo ..... Saint Louis	500,000	101	162	16.8	12	.....	42	1	2	5	1	.....	9	.....	3	.....	2	63	6
Kans .... Lawrence	8,500	1	2	12.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	30,000	21	23	40.0	1	.....	16	1	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....
Utah .... Salt Lake City	25,000	3	8	16.7	1	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 3, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Cal ..... San Francisco	305,000	28	73	12.4	8	1	.....	.....	2	.....	1	.....	13	.....	.....	.....	1	10	1
Sacramento	25,000	2	3	6.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	14,000	.....	2	7.4	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Vallejo	7,500	.....	1	6.9	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,496,280	2,664	4,542	31.6	406	32	1,820	58	45	52	60	.....	207	41	41	1	48	1,478	146

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 171 white, 4 colored. Rate per 1,000, white 24.1, colored 41.7. Providence has 100,500 white, 4,000 colored; deaths, 50 white, 1 colored. Rate per 1,000, white 25.9, colored 13.0. Sing Sing has 7,250 white, 250 colored; deaths, 6 white, 1 colored. Rate per 1,000, white 42.1, colored 208.7. Wilmington, Del., has 38,000 white, 6,000 colored; deaths, 22 white, 8 colored. Rate per 1,000, white 30.2, colored 69.5. Baltimore has 343,715 white, 56,285 colored; deaths, 157 white, 51 colored. Rate per 1,000, white 23.5 colored 47.2. District of Columbia has 114,000 white, 56,000 colored; deaths, 58 white, 48 colored. Rate per 1,000, white 26.5, colored 45.0. Norfolk has 14,900 white, 11,300 colored; deaths, 7 white, 11 colored. Rate per 1,000, white 24.5, colored 50.7. Richmond has 46,000 white, 34,000 colored; deaths, 24 white, 28 colored. Rate per 1,000, white 27.2, colored 42.9. Lynchburg has 10,000 white, 11,000 colored; deaths, 3 white, 6 colored. Rate per 1,000, white 15.6, colored 28.4. Wilmington, N. C., has 6,714 white, 10,286 colored; deaths, 2 white, 1 colored. Rate per 1,000, white 20.5, colored 5.0. Charleston has 25,000 white, 32,000 colored; deaths, 16 white, 30 colored. Rate per 1,000, white 33.3, colored 48.9. Augusta has 16,176 white, 10,824 colored; deaths, 6 white, 9 colored. Rate per 1,000, white 19.3, colored 43.3. Atlanta has 25,373 white, 16,175 colored; deaths, 6 white, 13 colored. Rate per 1,000, white 12.3, colored 41.9. Mobile has 28,000 white, 12,000 colored; deaths, 7 white, 8 colored. Rate per 1,000, white 13.0, colored 34.7. Selma has 3,082 white, 3,988 colored; deaths, 1 white, 5 colored. Rate per 1,000, white 7.3, colored 65.4. New Orleans has 155,000 white, 55,000 colored; deaths, 73 white, 39 colored. Rate per 1,000, white 24.5, colored 37.0. Nashville has 26,000 white, 11,000 colored; deaths, 8 white, 10 colored. Rate per 1,000, white 16.0, colored 47.4. Chattanooga has 7,860 white, 5,020 colored; deaths, 5 white, 4 colored. Rate per 1,000, white 33.2, colored, 41.6. Total white population, 1,337,570; total deaths, 622; annual rate per 1,000, 24.2. Total colored population, 340,128; total deaths, 277; annual rate per 1,000, 42.4.

The following reports, for the week ending July 3, are from places requiring burial permits and having less than 5,000 population:

Bridgewater, Mass., 4,000; one death. Brunswick, Ga., 3,000; deaths, 2; under 5 years, 1. East Haven, Conn., 1,200; no deaths. Edgartown, Mass., 1,400; one death. Fairfield, Conn., 4,000; one death. Murfreesborough, Tenn., 3,500; deaths, 2; puerperal 1. Nantucket, Mass., 3,750; deaths, 3; under 5 years, 1; old age 1. Saint Augustine, Fla., 2,500; no deaths. Shelbyville, Tenn., 2,000; diarrhœa 1, under 5 years. Total population, 25,350; deaths under 5 years, 3; total deaths, 11; annual rate per 1,000, 22.6.

The following reports, for the week ending July 3, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 6; under 5 years, 4; diarrhœa 4, old age 1. Allegheny, Pa., 78,000; deaths, 21; under 5 years, 8; diarrhœa 6, diphtheria 1, scarlet fever 1, pneumonia 1, puerperal fever 1. Bath, Me., 10,000; one death. Battle Creek, Mich., 7,500; deaths, 2; consumption 1. Belfast, Me., 5,278; old age, 1. Boulder, Colo., 3,000; no deaths. Brattleboro', Vt., 6,000; deaths, 3; puerperal 1. Calais, Me., 7,000; one death. Cambridge, N. Y., 1,850; diphtheria 1. Carrollton, Miss., 600; no deaths. Cedar Keys, Fla., 1,500; one death. Chico, Cal., 4,000; no deaths. Circleville, Ohio, 6,400; deaths, 6; under 5 years, 1; consumption 1, diarrhœa 1, malarial fever 1, old age 1. Columbus, Ga., 9,000; deaths, 5; under 5 years, 2; croup 1, malarial fever 1. Corinth, Miss., 2,300; measles 1. Cumberland, Md., 12,000; deaths, 6; under 5 years, 5; diarrhœa 2. Dallas, Tex., 20,000; deaths, 10; under 5 years 8; consumption 2, diarrhœa 2, whooping-cough 2. Davenport, Iowa, 23,000; deaths, 7; under 5 years, 1; consumption 1, diarrhœa 1, malarial fever 1, old age 1. Decatur, Miss., 1,000; no deaths. East Saginaw, Mich., 19,000; deaths 5; under 5 years, 3; consumption 1. Fayette, Miss., 300; no deaths. Flint, Mich., 10,000; deaths, 2. Helena, Mont., 3,500; deaths, 6; consumption 1. Huntingdon, Pa., 4,500; pneumonia 1. Huntingdon, Tenn., 850; one death. Indianola, Tex., 900; no deaths. Iuka, Miss., 1,000; enteric fever 1, under 5 years. Jefferson, Tex., 3,250; no deaths. Kenosha, Wis., 5,000; deaths, 3; under 5 years, 2; puerperal 1. Key West, Fla., 1,500; deaths, 7; under 5 years, 6; consumption 2, diarrhœa 1. Lansingburg, N. Y., 7,150; diphtheria 1, under 5 years. Lebanon, Pa., 9,000; one death, under 5 years. Little Falls, N. Y., 6,900; one death, under 5 years. Louisiana, Mo., 5,200; deaths, 2; diarrhœa 1. Marquette, Mich., 4,700; deaths, 2; under 5 years, 1; diarrhœa 1, diphtheria 1. Martinsburg, W. Va., 6,350; deaths, 4; under 5 years, 3; diarrhœa 4. Milledgeville, Ga., 4,000; one death. Mount Pleasant, Iowa, 5,000; one death. Muscatine, Iowa, 8,400; deaths, 2; under 5 years, 1; consumption 1. Muskegon, Mich., 13,000; one death. Natchez, Miss., 10,000; deaths, 3; under 5 years, 1; consumption 1. Nebraska City, Nebr., 5,000; deaths, 3; under 5 years, 2; diarrhœa 1, measles 1. Ocala, Fla., 1,000; no deaths. Oshkosh, Wis., 18,000; deaths, 5; under 5 years, 1; consumption 1, pneumonia 1. Painesville, Ohio, 5,000; deaths, 2. Pearlington, Miss., 1,500; no deaths. Phœnixville, Pa., 6,000; no deaths. Pleasant Hill, Miss., 250; no deaths. Pontotoc, Miss., 600; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Jervis, N. Y., 10,000; deaths, 2; consumption 1. Pulaski, Tenn., 2,100; deaths, 3; under 5 years, 1; consumption 1, whooping-cough 1. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., enteric fever 1; no population given. Rockland, Me., 7,000; consumption 1. Springfield, Ohio, 21,000; deaths, 9; under 5 years, 5; consumption 1, diarrhœa 4. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 4; under 5 years, 3. Tampa, Fla., 1,200; one death, under 5 years. Titusville, Pa., 9,000; enteric fever 1, under 5 years. Tuskaloosa, Ala., 4; one death, under 5 years. Wesson, Miss., 2,000; diarrhœa 1, under 5 years. Winchester, Va., 5,000; deaths, 5; under 5 years, 2; consumption 1, diarrhœa 2. Winona, Minn., 10,000; no deaths. Youngstown, Ohio, 17,000; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Total population, 467,732; deaths under 5 years, 69; total deaths, 157; annual rate per 1,000, 17.5.

ABSTRACTS FROM CONSULAR REPORTS.

BORDEAUX, FRANCE.—The report for the month of May gives a total of 394 deaths, of which 48 were caused by consumption, 12 by typhoid fever, 10 by diphtheria and croup, 5 by whooping-cough, 7 by small-pox, and 7 by diarrhœal diseases.

GUAYMAS, MEXICO.—The reports for the five months, from January 1 to May 31, show that this port has been free from yellow fever and other contagious diseases during that time. Only 30 deaths are reported, but it is not to be supposed that this is a correct report of deaths in a population of 5,500.

JACMEL, HAYTI.—The reports for the three weeks, ending May 29, show that the town is free from yellow fever and epidemic diseases, but no records of mortality are kept by the authorities.

MAURITIUS.—The report of United States Consul H. C. Marston for the month of April gives a total of 912 deaths, of which 540 were caused by "fever." The population of Port Louis is not given, but may be deduced from the annual rate of mortality, which is stated to be 30.6, corresponding to 912 deaths for the month.

MESSINA, SICILY.—For the month of March 242 deaths are reported, of which 7 were from typhoid fever and 43 from other contagious diseases. The death rate per annum was 37.6 per 1,000. In April there were 183 deaths, of which 10 were caused by typhoid fever and 20 by other contagious diseases, the annual death rate being 28.4 per 1,000.

PARA, BRAZIL.—United States Consul A. C. Prindle reports 127 deaths from all causes during the month of May. No epidemic or contagious disease prevailed, and malarial fevers are noted as the principal cause of death. The annual rate of mortality was 38.1 per 1,000.

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE WEEK ENDING JULY 3, 1880]

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Albany Hospital	Albany, N. Y	General	125	53	..	..	..	2	..	..	..	..	..	..	1	9	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	11	13	..	51
Emigrant Hospital	New York City	do	462	53	2	2	..	1	1	1	..	..	..	..	1	9	..	..	..	5	..	2	..	1	3	3	..	1	..	..	..	..	3	4	..	1	1	..	..	15	..	..	..	1	..	10	13	1	49
German Hospital	do	do	90	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	77
Hart's Island Hospital	Hart's Island, N. Y	do	300	202	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	6	1	213
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	6
Rochester City Hospital	Rochester, N. Y	do	125	60	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	6	..	62
Saint Mary's Hospital	do	do	320	232	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	4	2	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	9	4	2	235
Saint Barnabas Hospital	Newark, N. J	do	45	28	..	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	29
Saint Michael's Hospital	do	do	130	133	1	2	1	6	..	..	..	..	2	1	..	2	..	..	..	..	..	1	..	..	5	..	..	17	..	..	..	..	1	..	..	15	..	..	..	..	..	..	..	..	26	19	2	138
Memorial Hospital	Orange, N. J	do	13	8	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	10
Germantown Hospital	Germantown, Pa	do	25	23	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	24
Jewish Hospital	Philadelphia, Pa	do	40	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	5	..	21
Saint Mary's Hospital	do	do	80	..	..	..	..	5	..	..	..	..	1	..	..	1	..	..	..	..	1	1	..	3	..	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	2	2	..	16
Homeopathic Hospital	Pittsburgh, Pa	do	40	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	4	..	21
Freedmen's Hospital	Washington, D. C	do	300	238	..	..	2	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	11	15	8	226
Providence Hospital	do	do	160	117	2	..	..	23	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	4	6	..	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	17	1	128
Georgia Infirmary	Savannah, Ga	do	50	33	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	35
Saint Mary's Hospital	Galveston, Tex	do	300	84	2	1	..	7	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..	..	3	3	..	4	..	..	..	..	1	2	..	2	..	..	..	..	..	..	..	..	..	17	13	1	87
Cincinnati Hospital	Cincinnati, Ohio	do	500	..	9	1	1	11	..	..	..	..	6	5	..	4	..	..	..	..	..	..	3	..	3	1	2	..	6	..	..	..	1	..	..	1	2	1	..	2	..	..	..	..	70	76	4	288
Charity Hospital	Cleveland, Ohio	do	150	32	..	..	..	3	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3	..	37
Saint Luke's Hospital	Detroit, Mich	do	25	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	13
City Hospital	Saint Louis, Mo	do	411	201	1	2	1	66	..	..	..	..	6	8	..	15	..	..	..	..	1	..	..	1	7	8	..	9	..	..	..	..	2	3	1	1	..	..	..	..	..	..	..	52	52	9	192
Saint John's Hospital	do	do	..	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	18
Saint Louis Hospital	do	do	250	68	..	..	1	9	..	..	..	..	4	2	..	2	..	..	..	..	..	..	..	..	8	5	..	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	7	1	72
German Hospital	San Francisco, Cal	do	150	59	..	..	..	2	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	6	3	2	60
Naval Hospital	Chelsea, Mass	do	100	15	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	22
Do	Brooklyn, N. Y	do	115	46	..	..	..	4	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	1	1	..	46
Do	Washington, D. C	do	50	17	..	..	..	1	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	..	17
Do	Mare Island, Cal	do	77	27	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
Riverside Hospital	New York City	Contagious diseases	150	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	2	1	1	5	..	4
Municipal Hospital	Philadelphia, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	2	..	8
Nursery and Child's Hospital	New York City	Women and children	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..
State Hospital for Women and Children	Philadelphia, Pa	do	18	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
Women's Hosp. and Foundlings' Home	Detroit, Mich	do	30	25	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	1	30
Women's Hospital of Illinois	Chicago, Ill	Women	19	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	17
Insane Hospital	Augusta, Me	Insane	400	405	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	1	..	418
New Hampshire Asylum	Concord, N. H	do	300	293	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	291
Lunatic Hospital	Boston, Mass	do	200	163	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	159
State Lunatic Hospital	Worcester, Mass	do	650	501	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	2	1	520
Retreat for Insane	Hartford, Conn	do	150	141	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	4	..	139
Hospital for Insane	Middletown, Conn	do	515	515	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	216
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	..	1256	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	3	3	1265
Hudson River State Hospital	Poughkeepsie, N. Y	do	..	243	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	9	1	240
Marshall Infirmary	Troy, N. Y	do	200	142	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	8	3	138
Willard Asylum	Willard, N. Y	do	..	1594	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	1	..	1611
State Hospital for Insane	Danville, Pa	do	..	468	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	468
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	500	579	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	6	..	579
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	394	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	395
Eastern Lunatic Asylum	Williamsburg, Va	do	335	330	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	321
North Carolina Insane Asylum	Raleigh, N. C	do	..	283	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	283
Alabama Insane Hospital	Tuscaloosa, Ala	do	420	406	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	407
State Lunatic Asylum	Austin, Tex	do	375	359	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	358
Longview Asylum	Carthage, Ohio	do	..	670	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	670
Michigan Asylum	Kalamazoo, Mich	do	660	650	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	3	..	653
Minnesota Hospital for Insane	Saint Peter, Minn	do	..	668	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	4	..	669
Insane Asylum	Saint Louis, Mo	do	331	329	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	331
Insane Asylum of California	Stockton, Cal	do	1116	1117	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	1116

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Canada	Kingston	16,000	July 3	6	19.6													68.8
Bermuda	Hamilton	14,867	June 29	2	7.0													79.4
Do	do	14,867	July 6	3	10.5							2						81.4
Cuba	Havana	195,437	June 26	196	52.3				46		5		1					81
St. Domingo	San Domingo	8,000	May 23	2	13.0													83
Do	do	8,000	May 30	3	19.6													82
Do	do	8,000	June 6	4	26.1													82
Do	do	8,000	June 13	6	39.1													85
Do	do	8,000	June 20	2	13.0													84
Do	do	8,000	June 27	6	39.1													84
Trinidad	Port of Spain	30,000	Mar. 6	16	27.8													
Do	do	30,000	Mar. 13	27	47.0													
Do	do	30,000	Mar. 20	24	41.7								3					
Do	do	30,000	Mar. 27	47	71.7								1					
Do	do	30,000	Apr. 3	20	34.8													
Do	do	30,000	Apr. 10	18	31.3													
Do	do	30,000	Apr. 17	16	27.8													
Do	do	30,000	Apr. 24	33	57.4													
Do	do	30,000	May 1	19	29.6													
West Indies	Turk's and Caicos Is'ds	3,500	May 29	3	44.7													81
Do	do	3,500	June 5	2	29.8													82
Do	do	3,500	June 12	1	14.9													82
Do	do	3,500	June 19															84
Do	do	3,500	June 26	1	14.9													84
Do	do	3,500	July 3	3	44.7													84
Brazil	Rio Janeiro	330,000	May 8	193	30.5				31				4		8			
Do	do	330,000	May 15	227	35.9				26				2		8			
Do	do	330,000	May 22	201	31.8				23				3		5			
Do	do	330,000	May 29	194	30.7				14				4		5			
Do	do	330,000	June 5	202	31.9				17				3		8			
Azores	Fayal Horta	7,630	May 8	1	6.8													63
Do	do	7,630	May 15	4	27.3													62
Do	do	7,630	May 22	5	34.2													62
Do	do	7,630	May 29	2	13.7													63
Ireland	Queenstown	10,000	June 26	8	41.7													
Do	Belfast	230,000	June 26	94	26.8					3		24	2			4	3	55.7
Do	Dublin	314,666	June 26	197	32.6						19		3		2		23	
Scotland	Dundee	155,100	June 19	56	18.8								2			19	3	59.3
Do	Glasgow	589,598	June 12	290	25.6								2				44	52.6
Do	do	589,598	June 19	244	21.5								9				40	58
Do	Leith	58,479	June 26	25	21.9												4	56.0
England	London	3,254,260	June 19	1,243	17.7						6		14				147	
Do	Liverpool	544,056	June 19	280	27.0					3		5	5	13	3	52	40	58.6
Do	Bristol and Clifton	213,500	June 12	130	31.8												11	51.8
Do	do	213,500	June 19	97	23.7												10	56.9
Do	Stoke-upon-Trent	74,007	June 12	8	2.9													
Do	Tunstall	173,175	June 19	54	16.4												1	
Do	Leeds	318,929	June 19	96	15.7								2				4	58.6
Do	Sheffield	304,938	June 26	107	18.3													57.1
Wales	Cardiff	82,364	June 26	29	18.3												6	60.9
France	Paris	1,988,806	June 17	1,078	28.3						42		19				147	
Do	do	1,988,806	June 24	1,013	26.6						51		27				108	
Do	Lyons	342,815	June 12	168	25.6						13		4				5	
Do	Havre	92,068	June 19	46	26.0													55
Do	Rouen	104,902	June 26	71	40.3													
Switzerland	Zurich	22,103	June 19	8	18.9													
Holland	Amsterdam	316,952	June 19	140	23.0								1				9	62
Do	Rotterdam	150,378	June 26	73	25.3											34	1	
Germany	Berlin	1,087,500	June 12	807	38.6							9	3	12	7	145	90	61
Do	Hamburg	405,000	June 5	189	24.3										1		11	
Do	Breslau	276,000	June 12	174	32.8								4				27	63
Do	Mannheim	50,500	June 26	20	20.7													63
Do	Frankfort	128,000	June 19	59	24.0												3	85
Do	Barmen	95,000	June 19	52	28.5										1		3	64
Do	Cologne	141,639	June 12	82	30.1												13	
Do	Bonn	30,000	June 12	25	43.3												3	
Do	Brunswick	74,000	June 19	28	19.7								2		1		1	
Saxony	Leipsic	150,836	June 26	68	23.5								1				7	62
Do	Chemnitz	91,236	June 12	67	38.3												6	67
Do	Dresden	218,000	June 12	106	25.4											5	5	62
Belgium	Brussels	389,022	June 12	168	22.3								1				1	
Do	do	406,638	June 19	151	21.0						1						8	
Denmark	Copenhagen	235,254	June 15	93	20.6					5		6	1			10		57
Italy	Genoa	180,000	June 19	52	15.1													70
Do	Leghorn	97,963	June 26	53	28.2													73
Austria	Vienna	746,243	June 12	449	31.4						6						23	65
Do	do	746,243	June 19	382	26.7						10		2				17	64
Do	Trieste	128,233	June 12	95	38.7					7	7							
Hungary	Buda-Pesth	333,551	June 12	260	41.3						1		4				2	
Russian Poland	Warsaw	357,169	June 12	153	23.7													71
Norway	Christiania	116,801	June 12	43	19.11					13						15	3	54
Do	do	116,801	June 19	48	21.4					5	2	1				27		68
Spain	Cadiz	65,028	June 19	31	24.9													72
Barbary	Tripoli	20,000	June 12	9	23.5													82.8
Egypt	Alexandria	220,000	May 8	135	32.0													
Do	do	220,000	May 15	165	39.1													
Do	do	220,000	May 22	176	42.0													
Do	do	220,000	May 29	163	38.6													
Do	do	220,000	June 5	152	36.0													
Do	do	220,000	June 12	201	47.7													
Japan	Kobe	18,282	June 5	7	20.0													
Do	do	18,282	June 12	8	22.8													

National Board of Health

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REPORT ON DISEASES OF DOMESTIC ANIMALS.

[By JAMES LAW, Professor of Veterinary Medicine in Cornell University.]

Dr. J. L. CABELL:

SIR: In compliance with your request, I respectfully submit the accompanying statement as to how far in my opinion the functions of the National Board of Health must embrace a superintendence of the sanitary condition of the domestic animals. I have considered such animal diseases as determine specific and communicable disorders in man, and have sought to point out in what cases the gravity of the affection would demand the interference of a health board. A large number are mentioned over which a national board of health must exercise a careful supervision if they would fulfil their trust; and to enable them to accomplish this, Congress must give them power to add to their number men who have made a special study of animal diseases, and who are prepared to cope with them successfully. I have further sought to show how essential it is that a board so constituted should be invested with executive power and not left as a mere advisory body, which must lose in intelligence, efficiency, and esteem in proportion as it is debarred from the practical work of overcoming insanitary conditions and of instituting experiments to determine the best methods of sanitation.

Finally, I have entered on the question of those affections of the domestic animals which are not communicable to man, but are transmissible from animal to animal so as to constitute veritable plagues and to undermine our agricultural prosperity. As agricultural success is the true basis of all national prosperity, the suppression and extinction of these animal plagues is a work only secondary in importance to the arrest of epidemics, as national wealth is only second to moral advancement.

Here arises the question whether a board of health already constituted to deal with a certain number of animal plagues is not the most economical and efficient medium through which to deal with all, and whether the whole subject of animal sanitation should not therefore be placed in the same hands. In seeking to take an impartial view of this matter I have taken into account the financial interests involved and the necessity for a representation of these interests in any organization appointed to deal with the subject. I have also considered the great expenditure necessary to a prompt extinction of the exotic animal plagues, and the need of an executive head who can act promptly in every emergency and without the fatal delays that would attend on calling meetings of a health board whose members reside at long distances from each other. Also the vast importance of a speedy extinction of exotic plagues before they can gain a footing on the plains and boundless unfenced pasturages of the West and South, from which it would be hopeless to attempt their extermination. And, finally, the imperative need of prompt and effective work in order that the country may be made aware of the advantages of such an executive, and that there may be no excuse for a temporary—perhaps a final—abolition of the organization before they have had an opportunity to exterminate a single plague, and thereby to demonstrate their value to the nation.

In view of these and other considerations an opinion is respectfully submitted which is, at least, the result of no hurried conclusion, but of careful deliberation.

LIST OF COMMUNICABLE ANIMAL PLAGUES.

As the magnitude and gravity of this subject is but little appreciated, it will be best introduced by stating, in tabular form, the diseases of the domestic animals that are known to be communicable to man, and those which are intercommunicable between animals only. Afterward, the question will come up as to which of these diseases will demand the supervision of a health board, and under what circumstances.

A.—*Contagia common to man and animals.*

1. Glanders and farcy in horses, &c.
2. Canine madness, rabies in dogs, cats, &c.
3. Malignant anthrax in all domestic animals.
4. Tuberculosis in all animals.
5. Asiatic (malignant) cholera in all animals.
6. Milk-sickness in cows and other animals.
7. Small-pox in chickens, pigeons, &c.
8. Eczematous (aphthous) fever in bisulcates, &c.
9. Typhoid fever (?) in sucking animals.
10. Diphtheria in animals.

B.—*Parasites common to man and animals.*

1. Echinococcus in animals; Tænia echinococcus in dogs.
2. Cysticercus cellulosa in swine; Tænia solium in man.
3. C. medio-cannellata in calves; T. medio-cannellata in man.
4. C. tenuicollis in man, sheep, &c.; T. marginata in dog.
5. Tænia elliptica in man and cat.
6. Bothriocephalus latus in man, dog, &c.
7. B. cordatus in man, dog, &c.
8. Trichina spiralis in swine, &c.
9. Tricocephalus dispar in man and pig.
10. Strongylos gigas in man, horse, ox, and dog.
11. Ascaris mystax in cat and human being.
12. Fasciola hepatica in man, herbivora, and omnivora.
13. Distomum lanceolatum in man, herbivora, and omnivora.
14. Pentastoma tænioides in man, dog, sheep, &c.
15. Sarcoptis mutans in chickens and man.
16. Demodex folliculorum in dog, sheep, and man.
17. Æstrus bovis and other cuticolla in cattle and man.
18. Gregarina in man and animals.
19. Tricophyton tonsurans in man and animals. (Tinea tonsurans.)
20. Achorion schönleini in man and animals. (Tinea favosa.)
21. Microsporon adonini in man and animals. (Tinea decalvans.)
22. Oidium albicans in man and animals. (Thrush. m. uguet.)

C.—*Contagia communicable from one animal to another.*

1. Texas fever in cattle.
2. Swine plague. Intestinal fever of swine. Hog cholera.
3. Bovine lung plague. Contagious pleuro-pneumonia in cattle.
4. Rinderpest in cattle and other ruminants.
5. Sheep-pox. Variola ovina.
6. Swine-pox. V. suilla.
7. Cow-pox. Horse-pox.
8. Venereal disease of stallions. Dourine.
9. Foot-rot in sheep.
10. Strangles in horses.
11. Influenza in animals.
12. Infectious mammitis in cows.
13. Parturition fever in ewes.
14. Quebra bunda in horses.
15. Horse sickness of South Africa.

D.—*Parasites causing enzootics in animals.*

1. Scabies acariasis:
   - In sheep: Follicular scabies. Demodex folliculorum. Scab. (Dermatocoptis ovis. Dermatophagus ovis.) Black nose. Sarcoptis ovis. (Leptus Americani ?)
   - In horse: Mange. (Sarcoptis equi. Dermatocoptis equi.) Poultry mange. Dermanyssus avium, &c. Foot mange. Dermatophagus equi.
   - In ox: Mange. Dermatocoptis bovis. Foot mange. Dermatophagus bovis. Poultry mange. Dermanyssus avium, &c.
   - In pigs and dogs, mange. Sarcoptis suis (Squamiferous.)
   - In dog: Mange. Sarcoptis squamiferous (Suis). Follicular mange. Demodex folliculorum.
   - In cat and rabbit, mange. Sarcoptis nivar.
   - In chicken, scabies: Sarcoptis mutans. Dermanyssus avium.
2. Lung worms:
   - In sheep, goat, and camel: Strongylus filaria. Strongylus filaria, varietas longus. Strongylus Africana.
   - In horse and ox, Strongylus micrurus.
   - In swine, Strongylus elongatus.
   - In birds, gapes. Sclerostomum syngamus.
3. Sclerostomum hypostomum in sheep.
4. Strongylus filicollis in sheep.
5. Strongylus contortus in sheep and cattle.
6. Sclerostomum equinum in horse.
7. S. tetracanthum in horse.
8. S. suis in swine.

9. Tricocephalus affinis in cattle and sheep.
10. Stephanurus dentata in swine.
11. Echinorynchus gigas in swine, cockroach, ladybug, &c.
12. Ascaris suilla in swine.
13. Tænia expansa in sheep and cattle.
14. Cœnurus cerebralis in sheep, cattle, dogs, &c.
15. Œstrus ovis, grub in the head, in sheep.

In presenting this formidable list of diseases it must not be supposed that we advocate an immediate resort to suppression of the whole. A very few only will demand prompt and active suppression. For others, even of the most dangerous character, there is only wanted a guardiancy over trade to prevent the importation of disease or its extension into regions where it would be seriously detrimental. While for most places it will be at long intervals only and in special conditions that the resulting disease will arise to the dignity of an epizootic or epidemic and demand executive interference, yet there are few maladies mentioned above that may not and do not in particular circumstances attain to such dimensions, and a national board of health, charged with the supervision of the sanitary condition of animals as well as men, must be prepared to meet and successfully deal with any one of the above affections to which the human being is subject. Similarly, must an organization, formed to deal with the plagues peculiar to animals, be prepared to deal with any one of those affections when it attains to dangerous proportions.

GLANDERS AND FARCY.

This affection, which so remorselessly ravaged the cavalry regiments and mule trains during the recent American war, was, at the return of peace, scattered widely over the continent. In country districts we continually see it cropping out, and whole studs falling victims to its ravages, while in city car-stables hundreds are not unfrequently slaughtered to arrest the progress of the scourge.

The subjects of the slight and chronic attacks are frequently taken to a distance and sold as sound animals to unsuspecting purchasers, whose health and lives are thus too often sacrificed to satisfy the cupidity of an unscrupulous vender; for this terrible malady is as painful, loathsome, and fatal to the human system as to the equine, and every veterinarian of extensive practice can adduce instances in which men have perished miserably from the equine infection.

Were it only for the money losses inflicted by this scourge, it would demand the prompt destruction and safe disposal of every infected animal.

At the beginning of the present century, horses suffering from chronic glanders were habitually kept and worked in Great Britain, and the losses throughout the island were enormous. Now, where it is illegal to keep a glandered horse, these have been reduced to a very limited number. In the English army, where the presentation of symptoms equivocating glanders entails the prompt slaughter of the subject, this disease has been definitely eradicated, and a former loss of ten per cent. per annum has been entirely obviated. When we add to this the moral and economic considerations of the preservation of human health and life, the demand for the instant destruction of animals afflicted with this disease becomes imperative. A statute looking to this end is demanded in all States in which it has not been already enacted, and it becomes the duty of the National Board of Health not only to urge the passage of such a protective law, but to see that it is properly administered. That such a supervision is necessary may be inferred from the facts: 1st. That many of the most dangerous forms of glanders show deposits only in the lungs, testicles, or other distant and deep-seated organs, and these would escape the detection of an ordinary observer, or, indeed, of any one excepting a thorough and accomplished veterinarian, and the subjects of such deposits would be preserved for months or years to spread the disease; 2d. That to extirpate the disease when it has broken out in a stud or locality, it is not enough to dispose of the infected beasts and to thoroughly cleanse and disinfect the premises and movable objects, but this must be followed when requisite by an improvement of the hygienic conditions of the stud, and especially in the matters of ventilation, work, and alimentation. In the case of a disease like glanders, so fatal to both man and horse, the infected horse should be slaughtered as would a venomous reptile, without any consideration of indemnity. The laws under which the destruction is effected should, if possible, be State and municipal, so as to make their administration the especial duty of the local magistrates, but it should be made incumbent on all good citizens to notify such authorities in all suspicious cases, and in case of uncertainty as to the true nature of the disease or indisposition to administer the law, the National Board of Health should be the court of appeal empowered to institute an examination and to see that the law is enforced.

CANINE MADNESS, RABIES, HYDROPHOBIA.

In canine madness we confront a disease which even more than glanders demands restrictive measures. The glandered horse is dangerous mainly to those who voluntarily approach him, and he shows no mischievous propensity to inoculate other animals or man with his dreadful infection. But the rabid dog seems as if the impersonation of all evil. Himself suffering from one of the most excruciating and hopeless of diseases, he seeks to fasten his venomous fangs in the flesh of every living creature, as if he took a malignant pleasure in inflicting his own agonies on all within his reach. Nor is this peculiarity confined to the rabid dog. All animals that naturally use their teeth as weapons of offense when attacked by the violent type of rabies are seized with a similar uncontrollable desire to bite; and as the saliva of the sick is alike virulent in all genera, the danger of the propagation of the malady in this way is very great. The losses from rabies among men and farm animals run far higher than is generally supposed, and are confined to no season, the popular prejudice against the *dog-days* to the contrary notwithstanding. In seeking to reduce these or obviate them altogether much is to be done in the way of—first, regulating the keeping of dogs; second, in advice for the private management of dogs by their owners; third, in protection against the free importation of dogs from countries in which rabies abounds; fourth, in acquainting the general public as to the early symptoms of rabies; fifth, in the destruction of all rabid dogs and of all exposed animals that naturally use their teeth as weapons of offense; and, sixth, in the supervision and frequent examination of exposed animals of genera that do not use the teeth, for a sufficient length of time to insure that no form of the disease, either of a violent or occult type, shall be developed. The destruction of the rabid animal may safely be left to people in the locality, but further precautions would demand the interference of a board of health; hence all cases of rabies should be reported to it, that suitable protective measures may be taken.

MALIGNANT ANTHRAX IN ALL DOMESTIC ANIMALS, AND MALIGNANT PUSTULE AND INTESTINAL ANTHRAX (MYCOSIS) IN MAN.

In all the protean forms of malignant anthrax in animals, we find an infecting material which is not only deadly to quadrupeds, birds, and even reptiles and fishes, but which may be successfully inoculated from any one of these upon the human subject. The malady when conveyed to the human being is a very deadly one, whether it shows itself on the surface in the form of malignant pustule (Siberian boil plague), or internally, as *carbuncular sore throat* or *intestinal anthrax*. In this country it prevails mostly among butchers, tanners, and workers in hair, but is also well known as the result of consuming the flesh of infected animals. Infection from simple contact is by no means uncommon. Quite recently I saw an outbreak in which 100 cattle and three men suffered. In a second, 12 cattle and 2 men. In a third, a cat conveyed the malady to a young lady who nursed it. Where the disease becomes widespread, the resulting human mortality may be excessive, as when in 1770, 15,000 men died in six weeks, in San Domingo, from eating the diseased beef. Cooking is a very insufficient protection, as the resting spores have been shown to survive a boiling temperature, and, in particular cases, even 300 Fah., and a whole family were poisoned in Aberdeen, Scotland, by the beef that had been boiled for hours in broth. Further, and contrary to what holds with most other forms of virus, it is not essential that the skin should be broken in order to its absorption, and numerous instances can be adduced in which fatal results followed when it was deposited on the sound skin. Frost has no influence on its potency, and I have known a number of animals fatally infected by licking the frozen blood from a stoneboat, when the temperature was below zero. Nor is time nor putrefaction to be relied on. I have known cattle to perish promptly after lapping the liquids that leached from a grave in which an infected carcass had been buried nearly a year before. I have further known pastures, on which the disease had been developed for the first time in the memory of the inhabitants, maintain their infecting qualities for six years in succession, and to yield hay which continued to infect animals when fed to them at a distance from such pastures.

Being enthetic rather than infectious, this malady fortunately rarely attains to the dimensions of a plague, and rarely extends very widely from its true sources of origin. These are mostly in damp lands with a soil rich in decomposing organic matters, and especially such as have an impervious subsoil, or which, by reason of the basin-like conformation of the locality, has no sufficient drainage. Rich river-bottoms and drying-up marshes, ponds, and lakes, lands that have been overmanured, and those supplied by drinking-water collected from the surface or from strata rich in organic remains, are especially likely to be centers for the reception and preservation of this poison. In such localities, those animals are especially liable to contract the disease which are already in a somewhat morbid condition, excessively plethoric, having the blood charged with hurtful elements, the result of disease, faulty diet, or imperfect elimination, that have had secretions retained or fever developed in connection with hot dry seasons, lack of water, gastric and intestinal impactions, hot close buildings, insolation or excessive alternations of midday heat or midnight cold, and finally those in which from rapid growth or assimilation the tissues are soft, lax, and watery. With such animals, and in such localities, the disease is very liable to appear, and to continue to appear with increasing frequency and fatality, so that such places come to be known as "*dead lots*," and are avoided by all judicious stock-owners. The malady is always confined to limited districts, unless where the above-named conditions extend over a wide territory, as in the rich alluvial steppes of Eastern Europe and Asia, in the plains of India, and in certain of our

own rich river-bottoms and prairies. It deserves to be stated that, like malarious fevers in man, this affection has become increasingly frequent throughout most of the United States in the past few years. While there is a strong probability that the disease is due to a microphyte—bacillus anthracis—which is found in the blood in all the worst cases, and that certain conditions of the animal system are necessary to cause it to branch out into its special pathogenic development; yet, when its virulence has once been acquired it maintains this through an indefinite number of generations of the virus, and proves one of the most indestructible of known contagia.

Like glanders and rabies, therefore, this disease will demand a careful control by a National Board of Health, and measures must be resorted to for limiting its area and extirpating it wherever it threatens to attain to a dangerous prevalence.

TUBERCULOSIS IN ANIMALS AND MAN.

It is only since the inoculation experiments of Villemin that the dangers resulting from tuberculous animals have been at all appreciated. To-day after ten years of experimental observations by Villemin, Viscar, Klebs, Zurn, Bollinger, Leisering, Chanveau, Bagg, Semmer, Guenther, Harms, Biffi, Virgad, Gerlach, Buhl, Tilbury Fox, Burden Sanderson, and a host of others, it has been definitely established: 1st, that tuberculosis can be transmitted from animal to animal, from man to animals, and presumably from animals to man, by inoculation, or by the accidental contact of tuberculous matter with a raw or abraded surface; 2d, that raw tuberculous matter taken from man and animals and eaten by other animals may determine tuberculosis in the latter; 3d, that even the flesh of tuberculous animals will sometimes produce tuberculosis in animals that consume it, though with less certainty than if the tubercle itself were taken; 4th, that the milk of tuberculous animals will at times produce tuberculosis in susceptible subjects, and above all where the morbid deposit has taken place in the udder; 5th, that cooking of the tuberculous matter gives no guarantee of protection, as flesh is a poor conductor of heat, and tubercle that had been boiled from a quarter to half an hour has readily infected a number of animals that partook of it; 6th, that tuberculous matter mixed with water and thrown into the air from an atomizer causes with great regularity the development of tubercles in the lungs of animals respiring such air. The above conclusions will admit of some qualifications. It may be admitted, for example, that the consumption of the flesh and milk of tuberculous animals is often followed by no perceptible injury. Phthisical cows are often eaten without causing obvious disease in the consumers. I have known large dairies of tuberculous cows, in the hands of vigorous and healthy-looking owners, who consumed the milk freely. I have kept two rabbits consuming *all* the milk of a tuberculous cow for months, and until the latter died, without developing any signs of tuberculosis in the rabbits. I have kept other rabbits for two months on the milk of a cow suffering from acute tuberculosis without any appreciable evil result. It may be freely concluded that a large number of individuals while in the enjoyment of robust health will withstand the influence of tubercle taken in by the stomach, but it must be otherwise with the weak and young, those with poor feeding and worse air, those living in damp sunless localities, and subjected to much exposure. In a case that recently came under my notice in Brooklyn, N. Y., a family cow was found in an advanced state of tuberculosis, and the owner (William Martin) and his wife were evidently rapidly sinking under the same malady. In another case reported to me by Dr. Corlies, of New Jersey, a family cow supposed to be suffering from the lung plague was found to be afflicted with tuberculosis instead, and the owner's wife (a consumptive), who had been making free use of the milk warm from the cow, was persuaded to give it up, and underwent an immediate and decided improvement. It is for infants and adults who are somewhat infirm or out of health, or whose surroundings are not of the most salubrious kind, that the danger is greatest, but this embraces such an extended class that the moral interests involved are almost illimitable. The destruction of infancy and wasting of manhood from this cause is unquestionably far greater than has been heretofore realized; and on the moral ground alone this subject demands the watchful attention of a board of health. But even as a financial question, and as estimated by the losses in live stock alone, the subject attains to wide proportions. The infection of tubercle once introduced will often extend from the single diseased animal to a whole herd with startling rapidity. Last winter I visited a herd of sixty Devon cattle that were reported as perfectly sound six years ago. At that time a bull was bought which proved tuberculous, and the disease had steadily increased until at the time of my visit there was not a sound animal on the premises. Into a second herd nine poor calves were introduced in the fall of 1878. They were afflicted with a cough, which soon attacked the five other calves on the place, the eight cows, and two cows of a neighbor that pastured with them. At the time of my visit in the spring of 1879 all showed distinct symptoms of tuberculosis.

These may be thought to be extreme cases, but I am acquainted with districts in which 30 per cent. of the cattle suffer from tuberculosis, and with many high-priced herds in which this scourge yearly claims its victims. In his experiments Professor Gerlach had to utterly discard certain strains of high-bred swine, because of the astonishing frequency of tuberculosis in these subjects.

This disease opens up an extensive field for sanitary work, and particularly in the neighborhood of large cities, where so many infants, subjected to all the depressing influences of city life, are sustained by the milk of cows kept in unwholesome stables and fed so as to secure the greatest possible yield of milk, irrespective of results. Here the environment of the cows that yield the milk and that of the children who consume it are altogether favorable to the propagation of tubercle, and the subject requires the most careful supervision of the sanitary authorities.

The great mass of the adult city population is only a degree better in this respect than the infants; and as the cattle that are no longer useful for milk are too often made into beef, or rather sausages, the children of a larger growth are confronted with the risk of tuberculous meat as well as infected milk. The same dangers attend on the country districts, and though they are to some extent counteracted by pure air and better surroundings, yet the taint, if once introduced into a herd, tends to undergo a steady increase, until, as in the case of the country herds I have referred to above, all fall under its baleful influence. Then, again, in most of our large cities the cows are not kept over one season, but are constantly being replaced by fresh ones from the country; and it is only by purifying the source of the trade that we can secure sound cows in the cities.

That a supervision and restriction of tuberculosis is demanded cannot for a moment be gainsaid; but in view of the enormous proportions of such a work and the great monetary interests involved, together with the recent data of all exact observations on the transmissibility of the contagion and the different results obtained in different cases, it would be well, before proceeding far in this matter, to conduct a series of experiments which would tend to determine more accurately the conditions in which the different products are virulent and the circumstances in which exposed animals are susceptible. The proper supervision of this affection will demand the most careful consideration of the soundest and most enlightened minds. It would demand—first, the enforcement of a series of sanitary rules for the construction and management of city and suburban cow-stables, embracing the sites, exposure, drainage, space per animal, ventilation, water supply, food, cleanliness, &c.; second, a professional inspection of the cow-stables to insure that no cow with active tuberculosis is kept for the supply of milk, and no bull for the propagation of his kind; third, a professional inspection of the slaughter-houses and poulterers' to see that no flesh nor other products from dangerously tuberculous animals are allowed to pass into consumption as human food. As far as possible a sanitary control should be established over country herds as well, and means should be taken to extirpate the disease and remove its causes in the many districts in which the affection has become domiciled as an enzootic.

MALIGNANT (ASIATIC) CHOLERA.

With the threatened approach of a new visitation of cholera the National Board of Health must apply to the lower animals all those precautions which have proved beneficial in warding off this scourge from the human race. In this connection it need only be stated that Annesley, Jamieson, and many other Indian physicians testify that during cholera epidemics the domestic quadrupeds often showed a greater mortality than man, and that poultry-yards were utterly depopulated by the scourge; that Hildebrandt, Hering, Dick, Reynal, and others record the ravages of this plague simultaneously in man and animals in Europe; and that Burden Sanderson and others have produced the disease experimentally in the rodents by feeding paper dipped in the virulent alvine discharges of men. It has often been noticed that birds disappeared during cholera epidemics, the rational explanation being that they perish. This will especially demand the careful seclusion of all animals in cholera districts; the destruction, if necessary, of wild animals; the disinfection of all bowel dejections and of the carcasses of animals dying of the plague, as well as of the places and loose objects where the sick have been; and, lastly, the most careful attention to prevent further infection through fodder, litter, or other solids, and through surface or underground drainage, natural or artificial, into wells or streams, into contact with the food of men or animals or the places where animals resort to lick the soil. It is evident that no system of protection can be effective that fails to recognize that the lower animals transmit this virus as well as suffer its consequences.

MILK SICKNESS. THE TREMBLES.

The great importance of this disease has failed to be recognized, mainly because its source is to be found in certain backwoods districts rarely penetrated by those who preside over our medical literature, and because it gradually recedes before the advance of improved agriculture. Many medical men indeed express grave doubts as to its very existence. Yet the history of the malady is so circumstantial and clear that a doubt as to its specific nature is eminently disingenuous. In its source in unimproved marshy localities it closely resembles the malignant anthrax, also in its communicability to all animals, but it differs essentially in that it fails to show local anthrax lesions, in place of which it expends its energy on the nerve centers, producing great hebetude and loss of muscular power. According to Dr. Phillips, it is characterized by the presence in the blood of a microzym (spirillum), like that seen in relapsing fever. The germ is probably derived from the drinking-water or the surfaces of

vegetables, as certain wells are found to infect with certainty, and the disease has been repeatedly produced by feeding upon particular plants (Rhus toxicodendron, &c). That these plants in themselves are not the pathogenic elements, is shown by their innocuous properties when grown in places out of the region of the milk-sickness infection. It seems altogether probable that here, as in malignant anthrax, we are dealing with a microzym which has developed pathogenic properties and which can be reproduced indefinitely in the bodies of living animals. The great danger of this affection consists in the conveyance of the germ with unimpaired potency through the flesh and milk and through the manufactured products of the latter—butter and cheese. Some even hold that in animals giving milk the system does not suffer materially, but that it is saved by the drainage of the germs through the mammary glands, and that thus a milk-sick cow may remain for a considerable time unsuspected, while her milk, butter, and cheese are conveying mental and physical decay and death to many human beings, near and remote. For the disorder proves as fatal in man as in animals, and if in particular cases it fails to destroy life, it usually leaves the subject in a condition of hebetude and physical weaknes that makes life miserable.

The permanence of the germ in butter and cheese renders inevitable the conclusion of physicians in milk-sick districts, that cases of this disease must be frequent in city populations, but that its true nature is not recognized by the medical attendants. The whole subject demands a thorough experimental investigation at the hands of the National Board of Health, so that the true source and germ of the malady may be discovered, if possible, and that in any case intelligent measures may be taken to prevent its conveyance out of its native habitat.

SMALL-POX IN BIRDS.

In Europe and Hindostan variola is so common in pigeons and poultry as to constitute a veritable plague. Thus Guersent records that out of a dovecote of 1,000 scarce 100 could be found that did not bear marks of the disease, while Tytler says the poultry-yards in India were habitually depopulated by the plague. Bechstein and others claim that this is the true small-pox derived from the human being and conveyable back to man, while others, like Toggia and Gilbert, assert that it is communicable to the sheep. That this affection has not been recognized among us may be due to a difference in the environment which modifies the infection, or, perhaps, to the fact that men and pigeons do not live so much in common here as in Italy and India. Such an occurrence under Italian skies should, however, demand a careful investigation into the reality of such infection in our own States, and especially the Southern ones, during the prevalence of an epidemic of small-pox, so that whatever danger arises from this source may be detected and guarded against.

ECZEMATOUS (APHTHOUS) FEVER IN ANIMALS.

Although this disease is communicable to man in a mild form, and to infants who live on the fresh milk in the form of a violent and even fatal inflammation, yet, as it has at present no foothold on this continent, and, like rinderpest, sheep-pox, dourine, quebra bunda, &c., may be easily excluded by inspection and quarantine at our ports, it will be best to leave it with the purely animal plagues to the control of a veterinary sanitary bureau, and thus avoid the multiplying of inspectors.

TYPHOID FEVER IN SUCKING CALVES.

Reports have lately been published of the occurrence of this disease in calves, and of the infection of a number of persons that have eaten of the veal; it seems very desirable, therefore, that experiments should be instituted to ascertain whether animals kept on an exclusively milk diet are susceptible to this infection of man. It seems altogether probable that a mistake has been made and that the calves and their victims died of trichiniasis, intestinal anthrax, or of some other poison common to man and animals; but it should at least be shown by the National Health Board that the danger of the alleged transmission of typhoid fever is altogether fanciful.

TRICHINIASIS.

The life-history of the trichina spiralis is now fairly understood. The parasite is harbored by very many mammalia and probably even by reptiles, but is, above all, common in rats, pigs, and men. It has its two principal stages of existence—the *sexually mature* form, which lives and propagates its kind in the intestines only, and the *immature asexual* form, which, born in the intestines, bores its way through their walls and into the voluntary muscles, where it encysts itself. These last attain maturity only when their host is devoured by a carnivorous animal, and when the cyst is digested off so as to set the imprisoned trichina free. A third habitat may be named for those embryos that have been carried out of the system by the prevailing diarrhea ere they have had time to penetrate the intestinal walls and seek an asylum in the solid tissues. These can live for an indefinite length of time in pools of water without undergoing further development, until they are taken in by a mammalian host, when they penetrate the intestinal walls and encyst themselves in the muscles.

All this has been known for many years, but sanitation has advanced no further than to advise the microscopical examination of all pork, to enjoin that it be thoroughly smoked or well cooked before it is eaten, and to utter a warning against keeping pigs about slaughter-houses and feeding them on the raw waste products. Meanwhile, our pork hams have been, rightly or wrongly, acquiring a most undesirable reputation. Dr. Belfield and Mr. Atwood, of Chicago, pronounce 8 per cent. of the hogs killed in that city to be trichinous, and several European countries have forbidden the importation of American hams. In Germany, on the other hand, where all pork is subjected to microscopic examination, the statistics show that trichina have been found in but one of 2,000 hogs examined.

The protection of our population against this tremendous scourge, and of our market against the embargoes of frightened Europeans, demands a system which shall reach further and prove more thorough. The feeding of pigs on any flesh that is not thoroughly cooked should be strictly prohibited, a trichina inspector should be made to examine all pork exposed for sale, in our cities especially, and any discovery of trichinous pork, whether from such inspections or from the occurrence of the disease in man, should lead to such inquiries as would in all possible cases discover the source of such pork, and then should follow the destruction and prolonged boiling of all hogs, dogs, cats, rats, mice, snakes, and other carnivorous animals on the premises, the burning of the hog-pens and manure and the closure of the yards against hogs for one year; also, the shutting up of all wells or other collections of water to which the swine may have had access or into which drainage from the pens could have taken place.

Further, examination should be made in such localities of all animals, vertebrate and invertebrate, that the hogs could be expected to have devoured. Under such a system not only may we hope for a material decrease of trichinous hams and bacon, but for valuable discoveries of hitherto unsuspected and dangerous hosts of parasites, so that the work of extermination would continually become more easy and effectual.

ECHINOCOCCUS.

In all countries where it abounds (Iceland) this is one of the most destructive of the parasites of man. In the United States it is by no means so common as to give rise to much apprehension, and yet an examination of the internal organs of animals slaughtered, and a consultation of medical records, show that it is far from uncommon. As the parasite is derived from the dog, and as its tænia form in the bowels of that animal is so small as to be rarely recognized, it is likely to cause great damage before its presence is suspected in a locality. This is but one of a myriad of heavy charges that must be brought against the crowds of useless curs that everywhere abound, and more or less directly impair the health and prosperity of the people. With man alone the dog reciprocates in sustaining no less than seven dangerous animal parasites, in addition to the vegetable ones, producing the different forms of ringworm; with cattle and sheep he joins in maintaining three that devastate our herds and flocks. His ubiquity is a continual threat of canine madness to all living things. He has remanded to nature, or to less productive culture, large tracts that are admirably adapted to the raising of sheep, but where the losses from the devouring jaws of the dog have rendered sheep farming unprofitable. Sanitary considerations, alike affecting man and beast, therefore demand a rigid control of dogs and the imposition of a tax that shall be to a large extent prohibitory of their maintenance. Further, whenever echinococcus, cysticercus tennicollis, Bothriocephalus latus, B. cordatus, Strongylus gigas, Pentastoma tænioides, or Demodex folliculorum occur in man, attention should be given to the condition of the dogs in the locality, and measures taken to prevent the propagation of these parasites through their systems.

OTHER PARASITES.

To go over the other parasites which are common to man and animals would serve no good purpose. They rarely attain to the gravity of an epidemic, and will only demand sanitary interference in very exceptional circumstances; yet the board of health must be so constituted that it can effectually deal with any of these in such an emergency. For this, a veterinary sanitary committee will be always prepared, and will act mainly as an advisory body; but also, when necessary, in an executive capacity. Thus, an influx of measly pork should demand that it be traced to its source, and that its source, the tapeworm of man (T. solium), should be destroyed, while all pigs should be forbidden the infected ground for over a year. An influx of measly veal should demand a similar correction, and thus dangers of a material increase of either of these parasites will be done away with. In fishing localities where the Bothriocephalus latus or B. cordatus gains a wide diffusion it may become necessary to keep all dogs under the closest surveillance and to periodically rid them of the parasite. It might further become needful to control the consumption of certain fish, or of fish-eating mammals likely to be devoured by dogs. The prevalence of Sarcoptis mutans (scabies) in chickens may become so great that it will entail a most inveterate itch in man, the true source of which is seldom discovered. Again, gregarina have lately been found in the lungs of chickens, and in the bowels of pigs, and it seems quite within the bounds of probability that as they live on the hairs of man, so they may at times infest his internal organs.

For the above reasons it is desirable that Congress should provide or the incorporation with the National Board of Health of one or more veterinarians, whose functions it would be to consult with the present members in all matters in which the health of the lower animals affects that of man; to advise as to the enactment and administration of State laws for the prevention and extinction of plagues and parasites common to man and animals; to conduct experimental researches into the source, propagation, and extinction of these disorders and parasites of animals, and to act when necessary in an executive capacity in the exclusion or control of these scourges. To carry out these objects Congress should be asked to appropriate a sum of money, to be expended, as may be seen to be best, in experiments, in investigations, and in the control of these epidemics and epizootics.

Plagues and parasites peculiar to the lower animals.

In turning now to the communicable disorders of the lower animals to which man shows no susceptibility, we face a much more extended class. No less than thirteen different forms of contagia and thirty-four different parasites exist, any of which may induce a prevalence that rises to the dignity of a plague. Among the contagia given in our list the majority are probably indigenous to our soil, while four are certainly exotic. Of the latter but one (lung plague of cattle) is known to exist at present in the United States, but that one more imperatively demands instant and effective action than all our plagues of home birth. Arising in this country from contagion only and having an excessive incubation period (one to three months), it can be spread with the greatest facility by animals that carry the seeds of the malady but have not yet developed the disease. Having a constant tendency to the death of tissue and to the encystment of this as a mass (infecting material), which remains unchanged for many months in the chests of animals that are thought to have recovered, it is ever liable to be spread by the apparently convalescent. Add to this that this contagion, if once carried to our Western and Southern stock-ranges, could never be eradicated, but must remain as a permanent incubus and scourge as it has on the Steppes of Russia, the open lands of Australia, and the unfenced ranges of Southern Africa, and we see reason why a prompt attention should be given to its speedy extermination. If more is wanted to enforce this, it is the calculation (based on the European losses from this plague and the steady increase of our own herds of cattle) that this pestilence, left to itself and extended to our Western stock-ranges, will probably lay us under a tax of $130,000,000 per annum. But the flesh of animals attacked with this plague has never been shown to be injurious to man, and thus the question of its extinction is an exclusively pecuniary one and demands the action of the stock-owner rather than the sanitarian. While the necessary steps to insure the extinction of this and allied plagues are sufficiently well known to the veterinary profession, and while effectiveness and promptitude are best secured by placing the matter in the hands of one executive head, yet it will better command the confidence of the stock-owners and indirectly of Congress if one or two representative stockmen are officially connected with the work.

While on purely professional matters the veterinarian must of course decide, and in the execution of the work which is essentially professional he should direct, yet in many subjects connected with cattle-raising and the peculiarities of the trade in different parts of the country the knowledge and experience of the stockman will be of inestimable advantage in arriving at safe and effective local enactments that will not unnecessarily harass or hamper trade on the one hand nor be easily evaded on the other. A small committee or bureau of this kind, clothed with executive authority and with financial means equivalent to the end, could make much more effective work than could a committee of the Board of Health, who could not be got together to meet every emergency. Again, the first part of this sanitary work must be done as speedily as possible because of the great and increasing dangers that attend upon delay, and to secure this it will be necessary to appropriate a large sum of money to enable the executive to carry it on with uninterrupted energy to the end, since any suspension for lack of funds would entail the renewed spread of the disease and the loss of all that had been already expended. This consideration is a vital one, and of itself would decide me in favor of a separate executive, for the exclusively animal plagues, to be furnished with abundant means and full administrative power. A supplementary appropriation to the Board of Health, which might be largely used up for what at the moment and as viewed from a moral standpoint might appear as a more urgent demand, would be hurtful to both human and veterinary sanitation. If, for example, the work of exterminating the cattle lung plague had to be entirely arrested for want of means, it would soon again extend over the ground which it had lost, all that had been expended on it would be forfeited, and there would be much less likelihood of a speedy resumption of the work. If even the work were only retarded for lack of means, as has been the case in New York for the past three months, if the executive could only quarantine infected herds and partially control the movement of cattle, but could not kill the sick for want of means to indemnify the owners for their losses, a most hurtful blow would be dealt to the entire system of national sanitary legislation and administration. In either case the most prominent fact before Congress and the people would be that so many hundred thousand dollars had been expended for the extinction of a plague which, when the next appropriation was requested, either prevailed as widely as at first or was only appreciably less prevalent. All representations that the want of success had been due to the lack of means would receive little attention; the community would conclude it better to squander no more money on the matter; all further veterinary sanitary legislation would probably be rendered hopeless; no small amount of opprobrium would be thrown on the National Board of Health itself, and a severe blow would be dealt to all national health legislation.

It is especially fortunate that, by reason of the active measures carried out in the first six months of our work in New York, we can now point to seven counties virtually cleared of the pestilence, and by later restricting our work to controlling movement of cattle, we have been able to prevent any renewed extension of the pest; yet with a little more means New York might have been to-day all but clear of this scourge.

The time may come when the nation will be sufficiently educated to allow the sanitation of man and animals to be controlled by a single National Health Board; but at present, and for the exclusively animal plagues, we cannot afford to run any risks, and that method should be followed which will secure a certain and speedy result, and establish the principle of the extinction of such pestilences on a sound and unassailable basis. I would therefore urge as the result of mature deliberation, in view of all aspects of the question, that the control of those animal contagia and parasites which affect man as well should be placed in the hands of a veterinary committee of the National Board of Health organized for this purpose, while the exclusively animal plagues and the parasites that affect animals only should be committed to an organization drawn from the stock-owners and the veterinary profession, and not too large or unwieldy for the most prompt and effective action.

I consider it needless to encumber this statement by any further reference to the other animal plagues and parasites, as I would not recommend *immediate* executive action for more than one other in addition to the bovine lung-plague. Besides this, the work of the special veterinary organization would consist mainly in controlling the imports of live stock and in advising as to the management of local epizootics which did not immediately threaten the nation at large.

The following circular has been issued by the State board of health of Tennessee, relating to commerce with New Orleans:

OFFICE OF STATE BOARD OF HEALTH,
Nashville, Tenn., July 14, 1880.

Whereas one death from yellow fever, and two other cases, have occurred in New Orleans among the crew of the coffee-ship *Excelsior*, from Rio de Janeiro; and

Whereas the history of said ship, as recited at a meeting of the Louisiana State Board of Health, held in the city of New Orleans on the 12th instant, conclusively shows that the vessel and her cargo are infected with yellow fever; that her infected cargo is now stored in a warehouse in that city; and that her captain, some members of her crew, and a large number of visitors, as well as the persons (seventy-five or more) who were engaged in and about said infected vessel in breaking out cargo, and in handling, draying, and storing her infected merchandise, are scattered throughout said city; and

Whereas this board is charged with the duty of protecting the public health of this commonwealth against the introduction of contagious and infectious diseases, and believes such introduction is now seriously threatened by the above described condition of affairs at New Orleans, it is therefore hereby ordered—

First. That on and after the date of this publication no freight-car over any railroad, nor any steamboat or other water craft departing from the city of New Orleans after the 15th day of July, 1880, and until further orders, shall be allowed to enter the State of Tennessee nor to make a landing upon the borders of the State for the purpose of transacting any business whatsoever, unless said car, boat, or water craft shall present to the proper officers of this board a certificate from an officer or agent of the National Board of Health to the following effect:

(*a.*) That said officer or agent of the National Board of Health has personally examined the freight of such car, or the cargo, passengers, officers and crew of such steamboat or water craft, and has satisfied himself of the freedom from infection of said vehicle and its contents (persons and things).

(*b.*) That the freight or cargo comprises none of the following articles of the list recommended by the Louisiana State board of health to be subjected to obligatory quarantine and purification, to wit: Clothing, personal baggage; and dunnage, rags, paper stock, hides, skins, feathers, hair, and all other remains of animals; cotton, hemp, woolens, and coffee; nor any of the following additional articles, which are hereby declared contraband of quarantine in this State, to wit: Second-hand bedding, clothing, upholstered furniture, and textile fabrics; moss, jute, and "excelsior"; tropical fruits and productions.

Second. That any of the articles above enumerated may be shipped as freight from New Orleans, and transported through the

State of Tennessee by rail, if carried in close box-cars, securely locked, and in charge of an officer or agent of this board. The expenses of such officer or agent shall be defrayed by the railroad transporting such goods.

Third. That this order shall be enforced on the railroads at the southern State line by the officers of the board appointed for such purpose; and at Memphis, and elsewhere upon the Mississippi River, by the wharf-master, or other duly authorized officer. The penalties prescribed by law for the violation or infraction of the orders of this board will be rigidly enforced in carrying out this order.

T. A. ATCHISON, M. D.,
President.
W. M. CLARK, M. D.,
Secretary.
E. W. COLE,
JOHN JOHNSON,
J. D. PLUNKET, M. D.,
J. M. SAFFORD, M. D.,
E. M. WIGHT, M. D.,
Members.

The following circular, relating to the same subject as the preceding, has been issued by the State board of health of Mississippi:

OFFICE OF MISSISSIPPI STATE BOARD OF HEALTH,
Jackson, Miss., July 16, 1880.

Whereas the bark Excelsior, from Rio de Janeiro, laden with coffee, having arrived at New Orleans infected with yellow-fever; and

Whereas her cargo is now stored in a warehouse in the latter city, and it is said a number of persons who were engaged on and about said bark in unloading, draying, and storing her cargo are now in said city, it is therefore hereby ordered—

First. That on and after this date, and until further orders, no car or train of cars departing from the city of New Orleans shall be allowed to enter this State, and no steamboat or other water-craft from said city shall be allowed to land at any point in this State unless they have undergone an inspection by an officer of the National Board of Health, as is provided in the rules of said Board, and are provided with a certificate of such inspection.

Second. That no part of the cargo of the bark Excelsior, and no freight from the warehouse in which said cargo is stored, shall be brought to any point in this State.

Third. That no persons from New Orleans shall be allowed to come to any point in this State unless they hold a certificate from an officer of the National Board of Health that they have not been exposed to infection.

Fourth. That the chief health officers of the counties, and the municipal Boards of Health are charged with the enforcement of this order, and any violation thereof will be punished as is provided by law.

WIRT JOHNSTON, M. D.,
ROBERT KELLY, M. D.,
Executive Committee.

Approved.
J. M. STONE,
Governor.

INSPECTION OF STEAMBOATS AND OTHER WATER CRAFTS AT SHREVEPORT, LA.

AN ORDINANCE relating to the inspection of steamboats, barges, and other water-crafts coming from any points on the Mississippi River where yellow fever or other infectious diseases may exist, and the establishment of a quarantine station below the city.

SECTION 1. *Be it ordained by the council of the city of Shreveport in legal assembly convened*, That during the months in which the inspection station of the National Board of Health at or near the mouth of Red River is in operation, no steamboat, barge, or water-craft coming from any port south of the mouth of Red River, or from any other point on the Mississippi River, or its tributaries, where yellow fever or other infectious diseases are known to exist, shall be allowed to enter or land at this port without a clean bill of health or certificate issued or countersigned by an inspecting officer at Station No. ——, at or near the mouth of Red River. This certificate must show that the passengers and crew of such water-craft are free from contagious and infectious diseases, and that the baggage of passengers and crew, and the freight, furniture, and outfit of vessel are free from infection likely to engender such diseases.

SEC. 2. *Be it further ordained, &c.*, That whenever, in the opinion of the board of health of Shreveport, La., the public safety demands it, there shall be created a second inspection station in the vicinity of the city at such point as the board of health may designate. At this station all steamboats, barges, or other water-crafts shall be detained for inspection by the health officer of Shreveport, who shall issue to such vessels a certificate before they shall be permitted to moor at this port.

SEC. 3. *Be it further ordained, &c.*, That any captain, owner, employé, or other officers or persons in charge of such water-craft, who shall violate any part of this ordinance, shall be arrested, and, upon conviction before any court of competent jurisdiction, be fined not less than twenty-five nor more than one hundred dollars for each and every offense; and such boat or water-craft, upon landing or entering at this port, in violation of any part of this ordinance, shall at once be removed beyond the limits of the port.

Adopted.

A. CURRIE, *Mayor.*
W. J. BRUNER, *Comptroller.*

HEALTH CIRCULAR, HAVANA, CUBA.

The following circular evidently leaves it optional with masters of vessels bound to the United States to take out bills of health or not:

In consequence of doubts having arisen with port physicians in regard to whether it is or is not obligatory upon all vessels leaving the island to take bills of health, his excellency the governor-general, in conformity with the suggestions of the superior board, has been pleased to order that national as well as foreign vessels are free to take out or not the said bills of health, except when bound to Spanish ports, in which case they shall provide themselves with the document referred to; which, by order of his excellency, I communicate to your excellency for your information and compliance, and you will please order the publication of the resolution in the official bulletin of that province under your worthy command, for general information.

God preserve you many years.

Havana, June 18, 1880.

The secretary of the general government:

JOAQUIN CARBONELL.

To the civil governor of the province of —— ——.

YELLOW-FEVER CASE AT NEW ORLEANS.

On Saturday, the 10th of July, 1880, at 10 a. m., James Kenney, aged 19 years, a native of Scotland, was admitted to the Touro Infirmary, from the Swedish bark Excelsior, presenting symptoms of yellow fever.

The bark Excelsior was then lying at the foot of Calliope street, post 13, first district. This vessel, 450 tons, S. L. Byorkgren, master, sailed from London 17th February, 1880, and arrived at Rio de Janeiro April 13, 1880; left Rio on the 10th May and arrived at Mississippi quarantine station June 24, having been on the voyage about 46 days. The crew consisted of three officers and nine seamen. No case of sickness occurred in Rio or on the voyage to the Mississippi quarantine station. The vessel was detained at the quarantine station 12 days. The cargo consisted of 3,600 sacks of coffee; ballast, granite rock. She left the quarantine and arrived at New Orleans on the morning of the 5th July and commenced discharging cargo, which was deposited in the Montgomery Warehouse, on Fulton between Julia and Saint Joseph streets.

The case of yellow fever was not developed until the vessel had been for 62 hours at the wharf at New Orleans.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BUFFALO, N. Y., July 12.—Dr. A. H. Briggs, health physician, forwards a copy of a circular, addressed to employers, to obtain through them a record of absence of employees on account of sickness. The record is to be kept, on a form furnished by the board of health, in all establishments employing not less than 20 persons, to begin July 15, and to end September 15. The object is to determine the influence of the Hamburg Canal upon the health of persons employed in its immediate vicinity.

BURLINGTON, VT.—Under date of July 10, Dr. G. M. Ockford observes that the past month had been generally healthy in this city. In June there was very little sickness of any sort, but the heat of July produced an increase in diarrhœal diseases; no epidemic tendency is observed.

FORT RINGGOLD, TEX.—Under date of June 30, Surgeon Joseph R. Smith, U. S. A., makes the following report:

As far as I can learn, no new cases of small-pox have occurred in Rio Grande City, Tex., during the month, nor any deaths from this cause.

The cases occurring since my first report have been chiefly among persons visiting the town from surrounding ranches.

The vaccinations and revaccinations reported as being practiced on May 30, 1880, were unsuccessful.

HAVANA, CUBA.—Advices of July 3 report 50 deaths from yellow fever during the week ending that day. Some cases have occurred among the shipping at the wharves, especially on Spanish vessels. All vessels bound to United States ports are fumigated and disinfected on discharging, and in some cases again after loading. No great extension of the fever is to be expected in Havana at present, as there are but few persons liable to have it. Not many foreigners have come in, the army is mostly in the country, and the naval vessels absent.

During the week ending July 10, there were 71 deaths from yellow fever and 11 from small-pox. Of the deaths from fever, 28 were in the city and 43 in the military hospitals. The village of Casa Blanca, on the other side of the bay, near the entrance to the harbor, is suffering greatly from the fever. Epidemic diarrhœa and dysentery have caused many deaths among children and old persons in the city and suburbs.

For the week ending July 10, 1880, out of a total mortality in Havana of 250, there were 76 deaths from yellow fever, 10 deaths from small-pox, 4 deaths from typhoid fever. Prevailing diseases were yellow fever, small-pox, diarrhœa, and dysentery.

For the week ending July 16, 1880, there were 74 deaths from yellow fever, and approximately there were 200 cases of that disease in the city and suburbs.

Advices from Havana to the 17th July state that, "Among all the vessels fumigated, purified, and disinfected, there is yet to be noted a subsequent invasion of yellow fever, and that so far this season all vessels that have been infected by yellow fever have contracted it at the wharves, in none has it occurred in the open bay, and that at the date of writing (July 17, 1880) there were about ten vessels in port which have or have had yellow fever on board.

PENSACOLA, FLA.—S. C. Cobb, president board of health, sending report for the week ending July 3, remarks:

We are pushing our people to constant attention to sanitary matters, with good results. The ships admitted to *pratique* are remarkably clean, and no danger is apprehended.

TUXPAN, MEXICO.—Under date of July 5, Dr. A. M. Boyd gives the following report on the condition of the city:

The health of this port and vicinity has been unusually good during the past month. The total number of deaths from all causes was ten; 3 from malarial fever, 1 from croup, 1 from epilepsy, 1 from consumption, 1 from pneumonia, 1 from colic, and 2 from accidental causes; making the death-rate 16.6 per 1,000 of the population of 7,186. The sanitary condition of the place is excellent. No epidemic or contagious disease of any kind has occurred here for more than two years, and we hope by strict attention to sanitary rules to avert an epidemic this year, so as not to interrupt intercourse with the ports of the United States.

ABSTRACTS FROM CONSULAR REPORTS.

BRADFORD, ENGLAND.—United States Consul C. O. Shepard sends a report of deaths for the week ending June 19. The number of deaths was 77, and the annual rate per 1,000, 20.2. Six deaths were from scarlet fever, said to be of malignant type; only 7 deaths were due to all other zymotic diseases. Other causes were, consumption, 3; other lung diseases, 16; heart diseases, 10; and 4 from violence.

COLOMBO, CEYLON.—United States Consul W. Morey forwards a copy of the report of the municipal council for the last quarter of 1879. The year had passed without any epidemic disease, and no unusual mortality. The report is chiefly upon the danger of extending the new portion of the city over the "Cinnamon Gardens," a tract in which the *ground water* is so near the surface as to render the construction of healthy foundations and proper privies difficult and expensive. Thorough general draining, by means of sewers leading to the sea, is recommended before building.

RIO DE JANEIRO.—United States Consul Thomas Adamson sends reports for the weeks ending June 12 and 19. There were 30 deaths from yellow fever, and 3 from typhus fever in the two weeks. The total number of deaths was 372, in a population of 330,000, giving an annual death-rate of 29.3 per 1,000. Shipmasters complain bitterly of the regulation that makes bills of health show the vessel as leaving *in quarantine*, so long as any cases of yellow fever exist here. Many refuse to take consular bills of health.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

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REPORT OF QUARANTINE INSPECTIONS AND OPERATIONS FOR MONTH ENDING JUNE 30, 1880.

ARRIVED DURING THE MONTH.

Station.	Name of vessel.	Description of vessel.	Name of commander.	Where from.	Days of passage.	Date of arrival.	No. of crew.	No. of passengers.	Cargo.	Bill of health.	Sanitary condition of vessel.	Disposition of vessel, and remarks.
New Bedford.	Milton		J. R. Stivers	Talcuahano	83	June 11	21	None	Oil	Clean	Good.	Had 9 cases and 4 deaths from small-pox on voyage; detained in quarantine until further orders.
Do.	Michele	Bark	F. Miller	St. Helena	49	June 18	20	7	do	do	do	Free pratique.
Do.	President		Jona Chace	St. Eustatia, W. I.	19	June 19	28	None	Oil and bone	None	do	Do.
Do.	Petrel	Bark	Ariel Norton	St. Helena	59	June 19	34	4	Oil	Clean	do	Do.
Do.	Josephine	do	George F. Long	Montevideo	40	June 21	35	1	Oil and bone	do	do	Do.
Do.	Cape Horn Pigeon	do	E. L. Gifford	Talcuahano	91	June 22	21	None	Oil	do	do	Do.
Do.	Bartholomew Gonald	do	S. D. Robinson	St. Helena	63	June 26	31	11	Whale-oil	do	do	Do.
Philadelphia.	Shasta	Brig	F. Nichols	Cardenas, Cuba	10	June 15		None	Molasses	No		Permitted up June 17, by order Philadelphia board of health; 1 man sick in hospital.
Do.	Lillian	Schooner	John Crowley	Point a Pitre	17	June 20		do	Sugar	Yes	Poor	Detained for fumigation.
Do.	F. R. Baird	do	A. W. Mayhew	Charleston	10	June 20		2	Phos. rock	No	Good.	Detained; left 1 man in hospital.
Do.	Lucy W. Snow	Brig	J. Brainerd Hall	Point a Pitre	20	June 24			Sugar and scrap iron.	Not clean	do	Detained for inspection and fumigation; permitted up June 26, by order of board of health.
Do.	A. J. Pettengill	do	Edward Hall	Havana	17	June 25			Sugar	Clean	do	Detained for inspection and fumigation; permitted up June 28, by order of board of health.
Mobile.	Cato	Bark	Krogel	do	5	May 31	10		In ballast		do	Quarantined for 10 days; then fumigated, disinfected, and discharged.
Do.	Wild Gazelle	Steamer	O'Neal	Mobile	1	June 4	6				Bad	Quarantined for 1 day; then cleaned and discharged.
Do.	Tasmanian	Ship	Sulio	Rio Janeiro	44	June 5	18		In ballast	Foul	Good.	Quarantined for 20 days; then fumigated, disinfected, and discharged.
Do.	Margaret	Bark	Yuille	do	60	June 18	14		do		Bad	Quarantined.
Pensacola.	Emilio R.	do	A. Fazio	Cape Town	52	May 30	11	3	do	None	Fair	Do.
Do.	Valley City	Steamer	H. M. Walker	Tampa	2	May 31	15		None	do	Good.	Discharged; admitted to free pratique May 31.
Do.	Almeda Willey	Schooner	A. Willey	New Orleans	2	May 31	18		do	Clean	do	Do.
Do.	Mary Jeannette	do	H. Crawford	do	3	May 31	3		Merchandise	None	do	Do.
Do.	L. A. Edwards	do	C. Petersen	Galveston	15	June 1	8	2	None	Clean	do	Discharged; admitted to free pratique June 1.
Do.	Austria	do	Albert Hulse	Bay Saint Louis	6	June 4	2		do	None	do	Discharged; admitted to free pratique June 4.
Do.	S. G. Hart	Barkentine	S. Pierson	New Orleans	2	June 5	10		Ballast	Clean	do	Discharged; admitted to free pratique June 5.
Do.	Thos. J. Lancaster	Schooner	G. L. Hunter	do	3	June 5	8		None	do	do	Do.
Do.	Hedwidge	Bark	Thomas Owens	Montevideo	50	June 5	18		Ballast	do	do	In quarantine.
Do.	Maria	do	C. Calzada	Havana	7	June 6	12		do	do	Fair	Do.
Do.	Moss Glen	do	J. Buttner	Saint Vincent	29	June 6	12		do	do	do	Do.
Do.	Concordia	do	T. P. Anderson	Rio	49	June 6	11		do	Not clean	do	Do.
Do.	Laura Lewis	Schooner	J. Muilhead	Corpus Christi	22	June 7	5	1	None	None	Good.	Admitted to free pratique June 7.
Do.	Albert Ross	do	James Dellen	Cedar Keys	8	June 8	3	11	do	do	do	Admitted to free pratique June 8.
Do.	W. A. Watson	do	Joseph Mawn	Aranzas Bay	7	June 9	4		do	do	do	Admitted to free pratique June 9.
Do.	Florida	Bark	Joseph Marchese	Genoa	69	June 12	15		Ballast	Clean	do	Admitted to free pratique June 12.
Do.	Alabama	do	L. Durand	do	53	June 12	15		do	do	do	Do.
Do.	Eva	Steamer	H. Follett	New Orleans	1	June 14	9		None	None	do	Admitted to free pratique June 14.
Do.	Carl Gustaf	Bark	C. E. Farssell	Aspinwall	14	June 15	15		Ballast	Clean	do	Quarantined.
Do.	E. S. Newman	Schooner	S. H. Newman	Cardenas	7	June 15	9		None	do	do	Do.
Do.	Mary Jeannette	do	H. Crawford	New Orleans	1½	June 17	4		Merchandise	None	do	Admitted to free pratique June 17.
Do.	A. H. Waite	do	J. D. Dodge	Portland	21	June 17	7	5	None	do	do	Do.
Do.	Levanter	Barkentine	A. Vesper	Galveston	6	June 18	11		Ballast	Clean	do	Admitted to free pratique June 18.
Do.	Harry Judson	Schooner	Hollot	St. Mark's	4	June 19	3		None	None	do	Do.
Ship Island	Ganymede	Norwegian bark	L. A. Olsen	Havana	6	June 4	11	0	Ballast, white stone.	Clean	Fair	Detained for observation and fumigation.
Do.	Lucie Mary	Argentine Republic bark.	L. Olivier	Santos, Brazil	42	June 11	13	0	Ballast, stone	do	Filthy.	Inspection made at Pascagoula, vessel quarantined, thorough cleansing, fumigating, and whitewashing ordered.
Bagdad	City of Mexico	Steamship	J. McIntosh	Vera Cruz via Tampico.	3	June 17	45	20	General merchandise.	do	Good.	Do.

REMAINING IN QUARANTINE AT DATE OF LAST REPORT.

Station.	Name of vessel.	Description of vessel.	Date when placed in quarantine.	Disposition of vessel, and remarks.
Mobile	Margaret	Bark	June 18	Undergoing thorough cleansing.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 10, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	36,400	3	9	11.9	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
N. H ..... Concord	14,000	.....	3	11.1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Mass .... Boston	375,000	76	168	23.3	26	3	41	10	2	.....	2	.....	12	1	1	.....	.....	59	9
Cambridge	50,400	11	21	21.9	3	.....	6	.....	1	.....	.....	.....	1	.....	.....	.....	1	9	.....
New Bedford	27,000	2	9	19.3	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	2	2
Newburyport	13,800	1	5	18.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,500	.....	3	20.8	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Plymouth	7,100	.....	2	14.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence	39,000	10	16	21.4	2	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	52,000	11	21	21.0	3	1	8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lowell	60,000	14	21	18.2	1	1	4	.....	.....	.....	.....	.....	4	.....	.....	.....	2	7	.....
Lynn	37,000	4	11	15.5	1	.....	1	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Holyoke	22,500	6	10	23.2	2	.....	4	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Milford	9,800	.....	2	10.6	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,600	.....	3	11.5	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	23,500	2	8	17.7	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1
Springfield	33,500	13	17	26.4	1	.....	7	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	10	.....
Fitchburgh	12,600	.....	2	8.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I ..... Providence	104,700	28	51	25.4	10	.....	17	.....	.....	.....	2	.....	.....	.....	1	.....	1	20	.....
Conn .... New Haven	62,000	18	32	26.9	6	1	8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
New Britain	14,000	3	6	22.3	.....	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Vt ..... Burlington	16,500	8	11	34.7	1	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
N. Y .... New York	1,111,940	576	922	43.2	84	11	364	22	5	8	6	.....	55	10	2	.....	3	449	44
Brooklyn	564,448	246	377	71.1	27	2	287	8	.....	5	1	.....	24	1	3	.....	2	192	8
Yonkers	19,000	5	7	19.2	1	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Poughkeepsie	21,200	1	7	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Newburgh	18,040	1	2	5.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Sing Sing	7,500	1	7	48.7	.....	.....	2	.....	.....	1	.....	.....	2	.....	1	.....	.....	.....	1
Utica	34,000	.....	4	6.1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
Binghamton	17,600	1	2	5.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rochester	90,000	11	29	16.8	7	.....	3	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Buffalo	170,000	42	67	20.5	5	2	24	3	.....	.....	2	.....	2	.....	1	.....	.....	33	5
Seneca Falls	6,000	1	1	8.6	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Watertown	10,666	1	1	4.8	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	80	137	34.1	12	.....	5	1	1	4	.....	.....	5	.....	6	.....	.....	56	8
Newark	135,000	44	80	30.9	8	1	10	1	2	2	.....	.....	2	.....	1	.....	.....	.....	1
Orange	13,300	4	10	39.2	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Plainfield	8,160	1	3	19.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	901,380	260	467	27.0	49	8	144	5	4	1	4	.....	8	.....	.....	1	3	.....	.....
Erie	28,600	5	11	20.0	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	2
Pittsburgh	153,880	41	86	29.1	9	.....	20	6	4	.....	1	.....	5	6	.....	.....	.....	17	6
Del ..... Wilmington	44,000	12	29	34.4	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	400,000	113	209	27.2	31	4	53	5	3	2	11	.....	3	1	.....	.....	1	74	3
District of Columbia	170,000	54	96	29.4	10	1	20	.....	2	3	.....	.....	6	.....	1	.....	2	34	4
Va ..... Norfolk	26,200	9	17	33.8	2	.....	5	2	.....	2	2	.....	.....	.....	.....	.....	.....	13	.....
Richmond	80,000	24	38	24.7	5	.....	9	.....	2	1	.....	.....	.....	.....	.....	.....	1	13	1
Lynchburg	21,000	4	13	32.2	3	.....	3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
N. C ..... Wilmington	17,600	7	12	35.5	2	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	19	41	37.5	7	.....	9	.....	1	1	.....	.....	2	.....	.....	.....	1	.....	.....
Ga ..... Augusta	27,000	4	18	34.7	4	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	2
Atlanta	41,548	8	20	25.1	1	.....	4	.....	3	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Rome	5,000	.....	2	20.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	1	4	20.8	1	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Ala ..... Mobile	40,000	5	10	13.0	1	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	3	.....
Selma	7,500	3	9	62.6	.....	.....	.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss .... Columbus	6,740	.....	1	7.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	210,000	.....	99	24.6	12	.....	13	.....	1	4	3	1	5	2	.....	.....	1	.....	.....
Shreveport	8,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex ..... Austin	16,000	2	3	9.7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
San Antonio	20,500	3	12	30.5	3	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....
Brownsville	5,800	.....	3	26.9	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	2	3	7.1	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	12	29	35.4	3	.....	5	.....	4	.....	.....	.....	1	.....	.....	.....	4	11	1
Chattanooga	12,880	6	8	32.4	2	.....	1	.....	.....	1	.....	.....	.....	2	.....	.....	.....	4	.....
Clarksville	6,000	.....	2	17.3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ohio ..... Cincinnati	280,000	51	120	22.3	20	.....	16	6	.....	.....	2	.....	9	8	.....	.....	4	41	4
Dayton	37,000	6	11	15.5	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	1
Gallipolis	5,500	.....	1	9.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Mich ... Lansing	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Evansville	30,000	9	16	27.8	6	.....	2	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....	.....
Indianapolis	75,350	31	51	35.3	9	1	9	.....	4	1	.....	.....	2	.....	.....	.....	3	.....	1
Richmond	13,000	3	7	28.9	.....	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
Ill ..... Chicago	500,000	229	306	31.9	16	6	139	16	5	2	7	.....	6	1	2	1	1	167	8
Peoria	32,780	10	19	33.4	2	.....	8	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1
Aurora	12,000	2	2	8.7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Jacksonville	15,000	.....	4	13.9	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,200	2	2	12.7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	.....	1	5.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	117,000	29	50	22.3	.....	.....	.....	1	.....	1	1	.....	3	.....	.....	.....	.....	15	3
Minn .... Saint Paul	41,300	16	24	30.3	4	.....	9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....
Iowa .... Keokuk	15,800	.....	4	13.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Mo ..... Saint Louis	500,000	100	169	17.6	14	.....	51	.....	3	7	.....	.....	4	.....	.....	.....	2	72	6
Kans .... Lawrence	8,500	6	8	49.1	1	.....	4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	30,000	7	8	13.9	.....	.....	5	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	2	3	6.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 10, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Cal ..... San Francisco	305,000	31	85	14.5	8	.....	9	1	1	1	1	.....	3	1	.....	.....	1	15	3
Sacramento	21,500	.....	5	12.1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	14,000	2	3	11.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,967,025	2,355	4,228	27.6	441	42	1,379	95	56	58	48	1	185	40	23	1	34	1,355	132

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 168 white. Rate in table Providence has 100,700 white, 4,000 colored; deaths, 50 white, 1 colored. Rate per 1,000, white 25.9, colored 13.0. Sing Sing has 7,250 white, 250 colored; deaths, 6 white, 1 colored. Rate per 1,000, white, 43.1, colored 208.7. Wilmington, Del., has 38,000 white, 6,000 colored; deaths, 26 white, 3 colored. Rate per 1,000, white 35.7, colored 26.0. Baltimore has 343,715 white, 56,285 colored; deaths, 164 white, 45 colored. Rate per 1,000, white, 24.6, colored 41.7. District of Columbia has 114,000 white, 56,000 colored; deaths, 55 white, 41 colored. Rate per 1,000, white 25.1, colored 38.4. Norfolk has 14,900 white, 11,300 colored; deaths, 9 white, 8 colored. Rate per 1,000, white 31.5, colored 36.9. Richmond has 46,000 white, 34,000 colored; deaths, 18 white, 20 colored. Rate per 1,000, white 20.4, colored 30.7. Lynchburg has 10,000 white, 11,000 colored; deaths, 5 white, 8 colored. Rate per 1,000, white 26.0, colored 37.9. Wilmington, N. C., has 6,950 white, 10,650 colored; deaths, 5 white, 7 colored. Rate per 1,000, white 37.5, colored 34.3 Charleston has 25,000 white, 32,000 colored; deaths, 8 white, 33 colored. Rate per 1,000, white 16.6, colored 53.8. Augusta has 16,176 white, 10,824 colored; deaths, 6 white, 12 colored. Rate per 1,000, white 19.3, colored 57.8. Atlanta has 25,373 white, 16,175 colored; deaths, 8 white, 12 colored. Rate per 1,000, white 16.4, colored 38.7. Jacksonville has 6,000 white, 4,000 colored; deaths, 3 white, 1 colored. Rate per 1,000, white 26.0, colored 13.0. Mobile has 28,000 white, 12,000 colored; deaths, 4 white, 6 colored. Rate per 1,000, white 7.4, colored 26.0. Selma has 3,420 white, 4,080 colored; deaths, 4 white, 5 colored. Rate per 1,000, white 61.0, colored 64.0. New Orleans has 155,000 white, 55,000 colored; deaths, 66 white, 33 colored. Rate per 1,000, white 22.2, colored 31.3. Chattanooga has 7,800 white, 5,020 colored; deaths, 5 white, 3 colored. Rate per 1,000, white 33.2, colored, 31.2. Clarksville has 3,000 white, 3,000 colored; deaths, 2 colored. Rate in table. Keokuk, Iowa, has 15,000 white, 800 colored; deaths, 3 white, 1 colored. Rate per 1,000, white 10.4, colored 65.6 Lawrence, Kans., has 6,800 white, 1,700 colored; deaths, 5 white, 3 colored. Rate per 1,000, white 38.3, colored 91.1. Total white population, 1,343,144; deaths, 618; annual rate per 1,000, 24.0. Total colored population, 332,084; deaths, 243; annual rate per 1,000, 38.2.

The following reports for the week ending July 10 are from places in which burial permits are required and having less than 5,000 population:

Bridgewater, Mass., 4,000; one death. Brunswick, Ga., 3,000; no deaths. East Haven, Conn., 1,200; no deaths Edgartown, Mass., 1,400; one death. Morgan City, La., 2,000; no deaths. Murfreesborough, Tenn., 3,800; deaths, 2; under 5 years, 1; consumption 1. Nantucket, Mass., 3,680; deaths, 3; under 5 years, 1; old age 2. Saint Augustine, Fla., 2,500; no deaths. Shelbyville, Tenn., 1,900; diarrhœa 2, under 5 years. Total population, 23,480; deaths under 5 years, 4; total deaths, 9; annual rate per 1,000, 20.0.

The following reports for the week ending July 10 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 4; under 5 years, 1; consumption 1, diarrhœa 4. Allegheny, Pa., 78,000; deaths, 35; under 5 years, 13; consumption 3, diarrhœa 9, diphtheria 2, enteric fever 1, lung diseases 2, measles 1. Bath, Me., 10,000; deaths, 3; consumption 1, diarrhœa 1. Battle Creek, Mich., 7,500; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Boulder, Colo., 3,000; deaths, 2; consumption 1. Brattleboro', Vt., 6,000; no deaths. Calais, Me., 6,200; deaths, 2; consumption 1. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 6,400; deaths, 4; under 5 years, 1; diarrhœa 1, enteric fever 1, old age 1. Clinton, Mich., 1,200; one death. Corinth, Miss., 2,300; diarrhœa 1, under 5 years. Crystal Springs, Miss., 1,000; diarrhœa 1, under 5 years. Cumberland, Md., 12,000; deaths, 6; under 5 years, 3; diarrhœa 2, diphtheria 1, scarlet fever 1. Dallas, Tex., 11,000; deaths, 4; under 5 years, 3; diarrhœa 2. Davenport, Iowa, 23,000; deaths, 14; under 5 years, 7; croup 1, diarrhœa 6, pneumonia 1. Decatur, Miss., 1,000; diarrhœa 1, under 5 years. East Saginaw, Mich., 19,000; old age 1. Fayette, Miss., 300; no deaths. Flint, Mich., 9,000; deaths, 2; under 5 years, 1. Gunn City, Mo., 125; whooping-cough 1, under 5 years. Helena, Mont., 3,500; one death, under 5 years. Huntingdon, Pa., 4,500; no deaths. Huntingdon, Tenn., 850; one death. Indianola, Tex., 900; no deaths. Iuka, Miss., 1,000; pneumonia 1. Jefferson, Tex., 3,250; malarial fever 1. Kenosha, Wis., 5,000; one death. Lansingburg, N. Y., 7,150; deaths, 3; enteric fever 1, pneumonia 1. Lebanon, Pa., 9,000; deaths, 3; consumption 1, malarial fever 1, pneumonia 1. Little Falls, N. Y., 6,900; deaths 2; consumption 1, puerperal 1. Louisiana, Mo., 5,200; no deaths. Madison, Ind., 9,000; deaths, 5; under 5 years, 2; consumption 2. Marquette, Mich., 4,700; deaths, 3; diarrhœa 1, diphtheria 1, whooping-cough 1. Martinsburg, W. Va., 6,350; deaths, 3; under 5 years, 2; diarrhœa 2, enteric fever 1. Milledgeville, Ga., 4,000; deaths, 4; under 5 years, 2; consumption, 1; diarrhœa 1. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,400; diarrhœa 1, under 5 years. Muskegon, Mich., 11,300; deaths, 5; under 5 years, 4; diphtheria 1, scarlet fever 2. Natchez, Miss., 10,000; old age 1. Nebraska City, Nebr., 5,000; diarrhœa 1, under 5 years. Ocala, Fla., 1,000; deaths, 2; puerperal 1. Oshkosh, *Wis., 18,000; deaths,* 6; under 5 years, 1; consumption 1, diarrhœa 2, lung disease 1. Painesville, Ohio, 5,000; deaths, 3; under 5 years, 1; diarrhœa 1. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,600; diarrhœa 5, under 5 years. Pleasant Hill, Miss., 250; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Jervis, N. Y., 10,000; old age 1. Ripley, Miss., 1,000; one death, under 5 years. Rock Island, Ill.; deaths, 6; no population given. Rockland, Me., 7,500; diarrhœa 1, under 5 years. Springfield, Ohio, 21,000; deaths, 12; consumption 2, diarrhœa 5, old age 1. Starkville, Miss., 1,450; no deaths. Steubenville, Ohio, 13,500; deaths, 8; under 5 years, 5. Tampa, Fla., 1,200; no deaths. Titusville, Pa., 9,000; deaths 4, under 5 years; diarrhœa 2. Winchester, Va., 5,000; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Youngstown, Ohio, 15,500; deaths, 4; under 5 years, 3; diarrhœa 3. Total population, 430,525; deaths under 5 years, 69; total deaths, 168; annual rate per 1,000, 20.3.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE WEEK ENDING JULY 10, 1880.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	87	1	1	1	9																	1			3								1												
Albany Hospital	Albany, N. Y	do	125	51			1	1															1																								
Emigrants' Hospital	Ward's Island, N. Y	do	462	49	1			2	2	2			9	7	1	10				5				1	4	2		3					2	2		1	2	2		15				1				
German Hospital	New York City	do	90	77									3	1											2																							
Hart's Island Hospital	Hart's Island, N. Y	do	300	213																																								23	9	3	224
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	6																																								2			8
Rochester City Hospital	Rochester, N. Y	do	125	62		1		3																	1																			8	8		62
Saint Mary's Hospital	do	do	320	235	1	1																			4	3																		8	7		236
Saint Barnabas Hospital	Newark, N. J	do	45	28	1			4																	1	2		2																			32
Saint Michael's Hospital	do	do	130	138	4	1		9						1		1									1	6		12						1	4									15	22	4	127
Memorial Hospital	Orange, N. J	do	13	10				1																				2																3			13
Germantown Hospital	Germantown, Pa	do	25	24	1																																							4	5	1	22
Jewish Hospital	Philadelphia, Pa	do	40	21																					1																				4	1		24
Saint Mary's Hospital	do	do	80	16	2		1	6					2			3					1			4				2						1						2				5	1	1	19
Homeopathic Hospital	Pittsburgh, Pa	do	40	21	1																*1											1							1					4	6		19
Freedmen's Hospital	Washington, D. C	do	300	226			2																		1							2												11	9	3	225
Providence Hospital	do	do	160	128	1			24						1											3	5		15																15	11	4	127
Freedmen's Hospital	Augusta, Ga	do	50	17				1																				1						1												15
Georgia Infirmary	Savannah, Ga	do	50	35				1													1		1					1																5	3	1	36
Saint Mary's Hospital	Galveston, Tex	do	300	87	1			8					1	1		3									2	3		3					1			3								11	9		89
Cincinnati Hospital	Cincinnati, Ohio	do	500	288	9	6	2	12					2	2		4					1		4	1	2		5					1				2				2				68	70	11	279
Saint Luke's Hospital	Detroit, Mich	do	25	11																																									1		10
City Hospital	Saint Louis, Mo	do	411	192	1	1	1	15					4	1	1	17					1	1		1	14	3	2	18					1			2											
Saint Louis Mullanphy Hospital	do	do	250	68				6								2									3	7		16																10	11		67
German Hospital	San Francisco, Cal	do	150	60		1		1								1								1											1									6	3	3	60
Naval Hospital	Chelsea, Mass	do	100	22				1																1									1	1												19
Do	Brooklyn, N. Y	do	115	45				4					1			2									1	1		3								3								2	1		46
Do	Washington, D. C	do	50	17				1								1																												2	2		17
Do	Pensacola, Fla	do	20																																									1			1
Do	Mare Island, Cal	do	77	29		1		4																																						28
Riverside Hospital	New York City	Contagious diseases	150	4																																								3	2		5
Municipal Hospital	Philadelphia, Pa	do																																									10	1		9
Nursery and Child's Hospital	New York City	Children					3																																							
State Hospital for Women and Children	Philadelphia, Pa	Women and children	18	11																																							1			12
Children's Hospital	Washington, D. C	Children	72	36										1																		1												3	2	1	36
Women's Hosp. and Foundlings' Home	Detroit, Mich	Women and children	25	31											2																														3		28
Women's Hospital of State of Illinois	Chicago, Ill	Women	19	17																																									2	2		15
Insane Hospital	Augusta, Me	Insane	400	418																																									7	5		420
New Hampshire Asylum for Insane	Concord, N. H	do	300	291																																									1	1	1	290
State Lunatic Hospital	Worcester, Mass	do	650	520																																									3	7		516
Retreat for Insane	Hartford, Conn	do	150	139																																									3	1		141
Hospital for Insane	Middletown, Conn	do	516	516																																									3	2		517
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1265																																										8	7	3	1263
Hudson River State Hospital	Poughkeepsie, N. Y	do		240																																									2	2		240
Marshall Infirmary	Troy, N. Y	do	200	138																																									7	10	2	133
Willard Asylum	Willard, N. Y	do		1611			2																		1																				3	1	5	1608
State Hospital for Insane	Danville, Pa	do	700	468																																									1	1	1	467
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	500	579																																									12	8	2	581
Eastern Lunatic Asylum	Williamsburg, Va	do	335	321																																									1	3	1	318
North Carolina Insane Asylum	Raleigh, N. C	do		283																																									1			284
Alabama Insane Hospital	Tuscaloosa, Ala	do	420	407																																									4		3	208
State Lunatic Asylum	Austin, Tex	do	375	358											1																														5	7	1	355
Longview Asylum	Carthage, Ohio	do		669																																									4	3	1	669
Michigan Asylum	Kalamazoo, Mich	do	660	653																																									3	3		653
Minnesota Hospital for Insane	Saint Peter, Minn	do		669																																									2	1		670
Insane Asylum	Saint Louis, Mo	do	333	331																																									3		1	333
Napa State Asylum for Insane	Napa, Cal	do		339																																									9	8		840
Insane Asylum of California	Stockton, Cal	do	1116	1116																																									3	1	2	1116

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	June 26	2	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Do	....do	5,000	July 3	3	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Canada	Kingston	16,000	July 10	2	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.2
Cuba	Havana	195,437	July 3	220	58.7	.....	.....	.....	53	.....	9	.....	4	.....	.....	.....	.....	83
Hayti	Aux Cayes	9,000	June 19	5	32.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	....do	9,000	June 26	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
Do	Port-au-Prince	30,000	June 23	18	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
Do	....do	30,000	June 30	21	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91
Guadaloupe	Point-a-Pitré	22,919	June 5	14	31.9	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,919	June 12	8	18.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,919	June 19	7	15.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Teneriffe	Santa Cruz	16,610	June 12	7	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	71
St. Helena	St. Helena	6,241	June 19	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.5
Ireland	Queenstown	10,000	July 3	7	35.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	July 3	91	26.0	.....	.....	.....	.....	3	.....	23	4	.....	.....	5	2	59.3
Do	Dublin	314,660	July 3	203	33.5	.....	.....	.....	.....	.....	14	.....	3	.....	2	.....	33	.....
Scotland	Dundee	155,100	June 26	62	20.8	.....	.....	.....	.....	.....	.....	1	1	1	.....	16	2	58.1
Do	Glasgow	589,598	June 26	231	19.4	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	24	57
Do	Leith	58,479	July 3	25	22.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	60.9
England	Liverpool	544,056	June 26	246	23.6	.....	.....	.....	.....	.....	.....	3	1	16	2	24	44	60
Do	....do	544,056	July 3	267	25.5	.....	.....	.....	.....	.....	.....	2	1	20	2	22	39	59.6
Do	London	3,254,260	June 26	1,273	18.1	.....	.....	.....	.....	.....	14	.....	14	.....	.....	.....	129	.....
Do	Newcastle	148,000	June 26	60	20.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	61
Do	Bradford	.....	June 26	64	16.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....
Do	Sheffield	304,938	July 3	100	17.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.2
Do	Tunstall	201,442	June 26	75	19.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Do	Norton and Longton	28,267	June 19	32	59.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Bristol and Clifton	213,500	June 26	73	17.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	59.4
Wales	Cardiff	82,364	July 3	30	19.0	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	60.3
France	Havre	92,068	June 26	56	31.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	62
Do	Lyons	342,815	June 19	144	21.8	.....	.....	.....	.....	.....	6	.....	1	.....	.....	.....	9	.....
Do	Rouen	104,902	July 3	64	31.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Geneva	52,077	June 26	19	19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Do	Zurich	22,103	June 26	4	9.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Netherlands	Rotterdam	150,378	July 3	63	21.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	.....	.....
Germany	Frankfort	128,000	July 3	50	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	78
Do	Brunswick	74,000	June 26	34	23.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Do	Barmen	95,000	June 26	56	30.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	56
Do	Bremen	107,000	June 12	42	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	....do	107,000	June 19	43	21.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....
Do	Breslau	276,000	June 19	177	33.4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	22	65
Do	Berlin	1,087,500	June 19	880	42.1	.....	.....	.....	.....	.....	.....	19	7	2	1	160	75	66
Do	Hamburg	405,000	June 12	208	26.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	22	.....
Do	Mannheim	50,500	July 3	27	27.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
Bavaria	Nuremburg	100,000	June 5	50	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	56
Do	....do	100,000	June 12	38	19.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	58
Do	....do	100,000	June 19	45	23.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	61
Saxony	Dresden	218,000	June 19	74	17.7	.....	.....	.....	.....	.....	.....	1	1	.....	.....	8	8	62
Do	Chemnitz	91,236	June 19	66	37.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	67
Belgium	Antwerp	173,643	June 19	126	37.9	.....	.....	.....	.....	87	47	9	3	.....	.....	1	.....	68
Do	....do	173,643	June 26	97	29.1	.....	.....	.....	.....	82	21	10	3	.....	.....	.....	1	71.6
Do	....do	173,643	July 3	102	30.6	.....	.....	.....	.....	59	29	14	1	.....	.....	.....	.....	.....
Do	Brussels	389,022	June 26	145	19.3	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	5	.....
Denmark	Copenhagen	235,254	June 22	115	25.5	.....	.....	.....	.....	3	.....	7	.....	.....	.....	17	.....	61
Italy	Genoa	180,000	July 3	67	19.4	.....	.....	.....	.....	.....	.....	6	2	.....	.....	.....	.....	.....
Austria	Vienna	746,243	June 26	333	23.4	.....	.....	.....	.....	.....	5	.....	.....	.....	2	.....	12	64
Do	Trieste	128,233	June 19	82	33.4	.....	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....
Hungary	Buda-Pesth	333,551	June 19	226	35.9	.....	.....	.....	.....	.....	7	.....	3	.....	.....	.....	.....	.....
Russian Poland	Warsaw	357,169	June 19	173	26.8	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	66
Spain	Gibraltar	18,000	May 24	11	31.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65.8
Do	....do	18,000	May 30	6	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.4
Do	....do	18,000	June 6	5	14.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.4
Do	....do	18,000	June 13	7	20.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.6
Do	....do	18,000	June 19	6	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.7
Do	Alicante	34,926	June 26	16	23.9	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Barbary	Tripoli	20,000	June 19	11	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89.5
Egypt	Alexandria	220,000	June 19	214	50.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	220,000	June 26	178	42.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Colony	Cape Town	35,000	June 7	22	32.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66

National Board of Health

BULLETIN.

FOSTER, M.D. N.Y. 33 E. 28th ST.

VOL. 2.] WASHINGTON, D. C., SATURDAY, JULY 31, 1880. [No. 5.

MONTHLY REVIEW OF MORTALITY FOR MAY, 1880.

The mean population represented in the reports for the month of May shows an increase of 95,605 over that for April; the mean number of deaths per week being 37 more than last month, the annual rate is nearly the same, having changed only from 20.22 to 20.24 per 1,000 for the whole country. But while the death-rate of the white race, as represented in a mean population of 1,467,702, has only risen from 18.2 to 19.9, that of the colored population in the same cities, with a mean of 371,078, has increased from 32.0 to 37.4. Defective hygienic conditions, and want of care in the selection and use of food, have rendered the latter race more liable to the attacks of the diarrhœal and other diseases incidental to the warm weather.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
May 8	8,279,519	3,217	20.27	1,331	8.38	41.37	947	5.97	29.44	457	2.88	14.20	490	3.09	15.23	120	0.76	3.73	86	0.54	2.67
May 15	8,244,439	3,097	19.60	1,202	7.61	38.81	842	5.33	27.19	443	2.80	14.30	399	2.52	12.88	150	0.95	4.84	104	0.66	3.35
May 22	8,318,660	3,177	19.92	1,279	8.02	40.26	793	4.97	24.96	444	2.78	13.98	349	2.13	11.00	161	1.01	5.07	105	0.66	3.30
May 29	8,062,610	3,272	21.17	1,431	9.26	43.73	783	5.07	23.93	424	2.74	12.96	359	2.33	10.97	118	0.76	3.60	84	0.54	2.57
Totals	32,905,228	12,763	.....	5,243	.....	.....	3,365	.....	.....	1,768	.....	.....	1,597	.....	.....	549	.....	.....	379	.....	.....
Means	8,226,307	3,190¾	20.24	1,310¾	8.31	41.08	841¼	5.34	26.37	442	2.80	13.15	399¼	2.53	12.51	137½	0.87	4.30	94¾	0.60	2.97

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
May 8	34	0.21	1.06	77	0.48	2.39	99	0.62	3.07	52	0.33	1.61	84	0.53	2.61	35	0.22	1.09	49	0.31	1.52	6
May 15	46	0.29	1.48	72	0.46	2.32	104	0.66	3.35	46	0.29	1.48	74	0.47	2.42	33	0.21	1.07	49	0.31	1.58	7
May 22	56	0.35	1.76	81	0.51	2.55	159	1.00	5.00	43	0.27	1.35	61	0.38	1.92	43	0.27	1.35	33	0.21	1.04	4
May 29	34	0.22	1.04	75	0.48	2.29	269	1.74	8.22	43	0.28	1.31	70	0.45	2.14	39	0.25	1.19	44	0.28	1.32	3
Totals	170	.....	.....	305	.....	.....	631	.....	.....	184	.....	.....	289	.....	.....	150	.....	.....	175	.....	.....	20
Means	42½	0.27	1.33	76¼	0.48	2.39	157¾	1.00	4.94	46	0.29	1.44	72¼	0.46	2.27	37½	0.24	1.17	43¾	0.28	1.37	5

Causes of death.—The high temperature of May, having been remarkably uniform, had the effect of reducing the death-rate from *acute lung diseases* from 3.19 to 2.53 per 1,000, or 20.7 per cent. *Consumption* at the same time fell from 3.06 to 2.80, or 8.5 per cent. *Diphtheria* has remained nearly stationary at 0.61 per 1,000, while *croup* shows a decline from 0.39 to 0.27, or nearly 31 per cent. *Scarlet fever* shows some change for the better, falling from 0.52 to 0.48; and *enteric fever* has declined from 0.35 to 0.29, or more than 17 per cent. *Measles* are still slowly increasing, having risen from 0.42 to 0.46 since April. *Whooping cough* has fallen only from 0.26 to 0.24. *Malarial fevers* have advanced their rate from 0.23 to 0.28 per 1,000. Taking the six zymotic diseases just named, the changes of rate are so nearly balanced that the aggregate mortality from them in May was 2.35 per thousand, as compared with 2.39 in April. *Diarrhœal diseases* were noted last month as beginning to increase their rate of mortality; this increase was gradual until the third week in May, when a sudden rise from 0.66 to 1.00, followed by a leap from 1.00 to 1.74 the next week, shows the full establishment of the annual holocaust, which usually culminates about the middle of July.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,481,838	7,383	21.48	2,152	6.26	29.15	1,085	3.16	14.69	1,067	3.10	14.45	376	1.10	5.09	260	0.76	3.52
Southeast	1,436,025	2,664	24.19	586	5.32	22.00	398	3.61	14.94	188	1.71	7.06	42	0.38	1.58	29	0.26	1.09
Northwest	1,961,505	2,357	15.67	538	3.59	22.83	231	1.55	0.98	307	2.04	1.30	115	0.77	4.88	75	0.50	3.18

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	116	0.34	1.57	189	0.55	2.56	191	0.56	2.59	108	0.31	1.46	153	0.44	2.07	61	0.18	0.83	88	0.26	1.19	15
Southeast	13	0.12	0.49	35	0.32	1.28	307	2.79	11.52	48	0.44	1.80	64	0.58	2.40	54	0.49	2.03	54	0.49	2.03	
Northwest	40	0.27	1.70	80	0.53	3.40	121	0.80	5.13	28	0.19	1.19	70	0.46	2.97	33	0.22	1.40	33	0.22	1.40	

Distribution of diseases.—On dividing the country into three sections, as before, the first change observed in comparing this month with the last is the rise of the death-rate in the Southeast section from 21.06 to 24.19 per 1,000, while that of the Northeast declines from 21.82 to 21.48, and of the Northwest from 16.70 to 15.67. It will be readily seen that these changes are due to the increase of diarrhœal and other heat-diseases in the Southeast, and the reduction in pulmonary diseases in the two other sections. The latter class of diseases has declined as follows: Consumption in the Northeast from 3.40 to 3.16, or 7 per cent.; lung diseases from 3.68 to 3.10, or 16 per cent. Consumption in the Northwest from 1.84 to 1.55, or 16 per cent.; lung diseases from 2.74 to 2.04, or 26 per cent. Consumption in the Southeast from 3.74 to 3.61, or less than 4 per cent.; lung diseases from 2.52 to 1.71, or 32 per cent. At the same time the increase in mortality from diarrhœal diseases has been in the Northeast from 0.29 to 0.56, or 48 per cent.; in the Northwest from 0.25 to 0.80, or 69 per cent.; and in the Southeast from 0.77 to 2.79, or 72 per cent. From this comparison it appears that whether the relation of heat to disease be primary or secondary in causation, it is at this season the controlling element in determining the rate of mortality.

Taking the mortality from diarrhœal diseases as an index to the general effect of heat in raising the death-rate, the following comparison may be made between some of the principal cities. The figures express the deaths from diarrhœal diseases in per cent. of the total mortality (omitting fractions) for the week ending May 29: New York, 7; Brooklyn, 5; Baltimore, 23; District of Columbia, 27; Norfolk, 39; Richmond, 28; Atlanta, 47; Augusta, 50; New Orleans, 11; Louisville, 20; Cincinnati, 14; Chicago, 9; and Saint Louis 14. Near the Atlantic seaboard the rate closely follows the latitude, allowance being made in some cases, as in Richmond, Va., for elevation of site, and other topographical advantages. The great river cities, New Orleans, Cincinnati, and Saint Louis show a very low death-rate from heat-diseases, and without relation to latitude, New Orleans giving the lowest rate of the three.

Taking the other zymotic diseases in the order of the table, it is to be observed that diphtheria has increased in the warmer climate of the Southeast section 13 per cent., while it has advanced only 6 per cent. in the Northeast, and has declined 24 per cent. in the Northwest. Croup, on the contrary, has fallen off 48 per cent. in the Southeast, as compared with 31 per cent. in the Northeast and 18 per cent. in the Northwest. Scarlet fever has declined but 5 per cent. in the Northeast and 6 per cent. in the Southeast, while the rate has fallen off 13 per cent. in the Northwest. Enteric fever is now most fatal in the Southeast, where the rate has risen nearly 5 per cent., while it has declined 6 per cent. in the Northeast and 24 per cent. in the Northwest. Measles, having probably exhausted most of the available material in the Northeast, have there declined from 0.46 to 0.44, while the rate has increased in the Northwest more than 24 per cent. and in the Southeast 35 per cent. since April. Whooping-cough continues most fatal in the warmest climate, the rate in the Southeast having advanced from 0.45 to 0.49, or 9 per cent., while in the Northeast it has fallen from 0.20 to 0.18, or 10 per cent., and in the Northwest from 0.26 to 0.22, or 15 per cent. Malarial fevers show a general increase; in the Northeast from 0.20 to 0.26, or 30 per cent.; in the Northwest from 0.18 to 0.22, or 11 per cent.; and in the Southeast from 0.40 to 0.49, or 22 per cent. Small-pox, so far as reported, shows 15 deaths in the Northeast section, of which 9 were in Philadelphia, 3 in Fall River, Mass., 2 in New York, and 1 in Worcester, Mass. In the Northwest section, 4 deaths were reported in Chicago, and the Southeast shows one death, in New Orleans. During this month, active precautionary measures have been taken by the local authorities and State boards of health along the Mississippi River in establishing efficient quarantine and inspection services, with the co-operation of the National Board of Health, in view of the possible introduction of yellow fever from abroad, or the revival of the disease in places infected last year.

AN ORDINANCE RELATING TO THE TREATMENT OF CASES OF CHOLERA, YELLOW FEVER, SCARLET FEVER, SMALL-POX, AND DIPHTHERIA IN THE STATE OF ILLINOIS.

SECTION 1. *Be it ordained by the city council of the city of Jacksonville*, That any physician practicing in said city who shall be called to any sick person laboring under *cholera, yellow fever, small-pox, scarlet fever*, or *diphtheria* shall forthwith report the same to the health warden, in writing, giving the name, age, color, sex, nationality, and describing the street, number, house, or place where such sick person may be located, so that it may be easily found, together with such other facts as may be deemed necessary to a complete statistical record; and for neglecting so to do shall be liable to a fine of not less than ten nor more than fifty dollars for each offense.

SEC. 2. No person shall put out or remove, or allow to be put out or removed, from the premises owned or occupied by him or her into any street, alley, or other public place in said city, any person having *cholera, yellow fever, small pox, scarlet fever*, or *diphtheria*, or allow such sick person to go out into any street, alley, or other public place in said city, until such time after recovery as shall be prescribed by the health warden or attending physician, except as prescribed in section 6th of this ordinance. But such owner or occupant shall, in case no physician be called, immediately report such cases to the health warden; and any person who shall violate any clause of, or neglect to perform any duty required in, this section shall, upon conviction thereof, pay a fine of not less than ten nor more than fifty dollars for each and every offense.

SEC. 3. The health warden shall keep a book, in which he shall record a complete account of all cases of *cholera, yellow fever, small-pox, scarlet fever*, and *diphtheria*, including the name, age, sex, color, nationality, and such other facts attainable as he shall deem necessary to a complete statistical record of such cases occurring in said city.

SEC. 4. It shall be the duty of the health warden to visit and examine, or cause the same to be done by a competent physician, who may be the attending physician, all persons who may be reported to him as, or whom he may have reason to suppose to be, laboring under *cholera, yellow fever, small-pox, scarlet fever*, or *diphtheria*—except that when such report shall be made by a legally practicing physician he shall regard it as conclusive—and upon finding satisfactory evidence of the existence of such disease shall at once report the same to the city marshal.

SEC. 5. It shall be the duty of the city marshal, when notified by the health warden of the existence of *cholera, yellow fever, small-pox, scarlet fever*, or *diphtheria*, to cause a sign of warning to the public to be so placed on said building or premises that it may be seen and read by persons approaching said house or place; and if any person shall tear down, mutilate, destroy, or remove any such warning without the permission of the health warden, such person shall be liable for each offense to a fine of not less than ten nor more than one hundred dollars. The occupant of the house or premises upon which such notice or warning shall be placed shall be responsible for the removal of the same, and if it shall be removed without the permission of the health warden such occupant shall be subject to a like fine of not less than ten nor more than one hundred dollars, unless he shall notify the health warden within twenty-four hours after the removal of said warning.

SEC. 6. It shall be the duty of the health warden, mayor, and marshal of the city of Jacksonville, in case of the occurrence of *cholera, yellow fever, small-pox, scarlet fever*, or *diphtheria* in a person or persons destitute of a home or occupying a hotel or other public place of resort, or a private family under circumstances which, in the judgment of said officers, shall work especial hardship, to secure a place as secluded as practicable to which such sick person or persons shall be removed. The above-named officers shall supply the needed subsistence, nursing, medicine, &c., the necessary length of time, and they shall have the power to make the necessary provisions in advance for the care of persons affected with either of the above-named diseases when in their judgment public safety or economy may require it.

SEC. 7. It shall be the duty of the city marshal and the police force under his direction to see to it that any sign of warning of *cholera, yellow fever, small-pox, scarlet fever*, or *diphtheria* is not torn down, defaced, or otherwise destroyed or removed until such time as its removal shall be ordered by the health warden or attending physician; to replace such warning of removal; and to trace, find out, and prosecute any person or persons who shall illegally deface, destroy, or remove such warning, or shall violate or neglect any of the provisions of this ordinance.

SEC. 8. The health warden shall receive a salary of one hundred and fifty dollars per annum.

SEC. 9. This ordinance shall be in force from and after its passage and legal publication.

Passed June 3, 1880.

Attest: J. R. LOAR, *Mayor.*

J. W. MELTON, *City Clerk.*

The following is the form of report for contagious diseases, in accordance with ordinance passed June 3, 1880:

JACKSONVILLE, ILL., ——— —, 188–.

To the Health Warden:

SIR: You are hereby notified that the following described person has been attacked with ———:

Name, ——— ———; age, ——; color, ——; sex, ——; nationality, ——; date, ——— —, —.

Residence, No. —, ——— street.

——— ———, M. D.

ORDER RELATING TO RIVER COMMERCE IN ILLINOIS.

The following order was received on the 21st instant from Dr. John H. Rauch, secretary of the Illinois State board of health, and was issued on the 21st of July, 1880, by the honorable the mayors of the following cities and towns: East Saint Louis, Chester, Grand Tower, Cairo, Mound City, Metropolis, Golconda, Elizabethtown, and Shawneetown:

"For the purpose of preventing the introduction of yellow fever into this State, and to promote the sanitation of the Mississippi and Ohio Rivers, you will please hereafter not allow a steamboat to land, coming from below Cairo, at your port, unless upon presentation of a clean certificate of inspection as to cargo, passengers, officers, and crew, signed and indorsed by an inspector of the National Board of Health."

ABSTRACTS FROM CONSULAR REPORTS.

CARDIFF, WALES.—United States Consul Wirt Sykes reports a case of small-pox on board a vessel arriving from the port of Rouen. The seaman was taken ill during the passage. He was immediately removed to Hamadryad Seaman's Hospital, and a disinfection of the vessel was efficiently made. The remainder of the crew have been kept under supervision, with the co-operation of the dock-master, and isolation of the ship as far as practicable carried out; no new case has yet shown itself.

DEMERARA.—Under date of June 26, United States Consul Philip Figyelmesy forwards papers containing the following statistics of this colony:

The boundaries of Demerara have never been accurately defined, but the total area was computed by Sir Robert Schomburgh at 76,000 square miles. By the census of 1871, the population was estimated at 113,491, exclusive of troops and sailors in port, and about 7,000 aborigines. An approximate division of the population, other than native, gives 6,295 Chinese, 7,925 natives of Madeira and the Azores, 13,385 natives of West Indies, and 7,541 Africans, the remainder being from various other places. The births registered in 1879 were 9,211, being 2,476 in excess over the deaths, which were 6,735. The record of marriages is very incomplete, though all ministers of religion are required by law to deposit in the register's office duplicate registers of all marriages solemnized by them.

The hospital returns show a total of 6,353 admitted, and 372 remaining from 1878. Of these 6,725 patients, 718 died, or 10.6 per cent. There were 3,238 discharged as cured, and 1,992 as relieved. The least air space per patient in any ward was 563, and the greatest 2,398 cubic feet. Rain-water alone is used for drinking and cooking. The privies are on the dry-earth system, and lime is also used.

The Colonial and Seaman's Hospital reports for the year 4,829 cases and 589 deaths. The following proportions of cases to deaths are given: Consumption, 197 cases to 140 deaths; malarial fevers, 425 to 5; diarrhœa, 190 to 56; dysentery, 131 to 35; rheumatism, 271 cases, no deaths; syphilis, 229 to 4; cardiac dropsy, 104 to 48; renal dropsy, 60 to 19; leprosy, 77 to 7; epilepsy, 17 to 2; apoplexy, 14 to 13; other brain diseases, 40 to 8; heart disease, 25 to 8; bronchitis, 188 to 31; pneumonia, 55 to 29; pleurisy, 19 to 2; ascites, 34 to 19; jaundice, 32 to 5; Bright's disease, 25 to 14; ulcers, 938 to 10; abscess, 180 to 4; debility, 225 to 81; anæmia, 160 to 15; accidents and injuries, 275 to 14.

The report from the Leper Asylum shows 206 remaining from 1878, and 42 admitted in 1879. Of these 248, there were removed 47, left without permission 13, and expelled 3, leaving 124 December 31, 1879. Twenty-eight deaths occurred among the lepers, of which number 14 were natives of Guiana, 3 from Barbadoes, 3 from Africa, 2 from Madeira, and 6 from China and the East Indies. In many of these cases the immediate cause of death was some intercurrent disease; in one-half the cases no complication is noted. Those patients who are able to work are employed in gardening, &c., at the asylum.

The Insane Asylum reports 306 patients and 39 deaths during the year; no restraint is employed, and it is stated that accidents or injuries rarely result from the liberty allowed.

HONOLULU, SANDWICH ISLANDS.—United States Consul F. P. Hastings forwards the report of the board of health for the two years ending March 31, 1880. During that period measles and mumps were prevalent, but not fatal. Typhoid fever is noted as having caused no more than ordinary mortality among the other races on the island of Hawaii, but as having been so fatal among the natives as to threaten their extermination at no distant day. This mortality is chiefly ascribed to their refusal to avail themselves of medical aid and care, 311 out of 543 having died without such attendance. An earnest appeal is made by the president of the board, Samuel G. Wilder, to induce the natives to accept the gratuitous provision made for them in the hospital organized by Kamehameha IV and other institutions. The questions of sewerage and privies are fully discussed, and estimates given to show that the *Pail* or Rochdale system would be most effective and economical at Honolulu. The agent of the board of health reports 638 deaths for the year ending March 31, 1879. Of the decedents, 543 were Hawaiian, 46 Chinese, 18 British, 13 from the United States, and the remainder from all parts of the world. Died without medical attendance, 331, or nearly 52 per cent. There were 156 deaths under 5 years, and 88 over 70 years of age. Among the causes of death were typhoid fever 153, old age 70, whooping-cough 61, consumption 49, dropsy 55, debility 44, dysentery 26, cholera infantum 18, acute lung diseases 16, heart diseases 12, brain and nervous system 32, syphilis 11, diphtheria 3, liver diseases 3, suicides 3, accidents 9, and 37 from causes unknown. For the year ending March 31, 1880, the total of deaths was 745, of which 300, or 40.2 per cent., were unattended. The deaths under 5 years were 137, and 69 were over 70 years of age. Of the decedents, 550 were Hawaiian, 81 Chinese, 25 British, 27 from the United States, 18 Portuguese, 22 Pacific Islanders, 9 German, and the remainder divided among seven nationalities. Among the causes of death, in numerical order, were typhoid fever 196, consumption 96, unknown 95, dropsy 56, old age 55, debility 41, dysentery 28, diseases of brain and nervous system 48, diseases of heart 15, acute lung diseases 10, whooping-cough 7, measles 4, suicides 4, and accidents 15. The report from the Insane Asylum shows that there were 30 patients on April 1, 1878; of these 21 were natives, 1 negro, 6 Chinese, 1 German, and 1 American. Since that date 45 have been admitted. Of the 75 patients 23 have been discharged and 17 died, leaving 35 under care. Of these, 24 are Hawaiian, 6 Chinese, and 5 of various nations. In the Leper Hospital, island of Molokai, there were 684 patients March 31, 1880, three being children of lepers, and under 1 year of age. There were 424 males and 260 females. The greater portion of the lepers are treated as out-patients, and it is stated that a large number remain mixed with the people in the several islands. The average mortality among the lepers in the establishment at Molokai has been nearly 58 per 1,000 per annum. Dr. N. B. Emerson, physician to the establishment, remarks that on the approach of damp and chilly weather in November there is a general aggravation of symptoms in leprous persons, with fresh eruptions, attended with chill and fever closely resembling intermittent. Dr. Emerson concludes that while much may be done to palliate, no curative means have yet been found in this disease. He is convinced that the disease is contagious, and states that, though first introduced into the Sandwich Islands about 1856, there are now thousands of lepers, and the disease is still rapidly increasing among the native population.

ISLANDS OF MALTA AND GOZA.—The report for the two weeks ending June 30 gives a total of 181 deaths, of which 3 were by small-pox, 1 by measles, 1 by croup, 1 by typhoid fever, and 6 by diarrhœal diseases. The annual rate of mortality was 35.1.

MELBOURNE, AUSTRALIA.—For the month of April there were 398 deaths, of which 20 were by typhoid fever, and 11 by other contagious or infectious diseases. A decrease in the number of deaths, compared with the previous month, has taken place.

MILAN, ITALY.—United States Consul D. J. Crain sends the following report, under date of June 16, on the manufacture of quinine and other alkaloids from cinchona bark in Italy:

The manufacture of the salts and sulphate of quinine is an important Italian industry. It has been carried on at Milan and Genoa since 1870. Twenty-two thousand five hundred pounds are consumed yearly in Italy, of which one-half is made at Milan, 6,750 pounds at Genoa, and the balance imported from Germany. Forty-five thousand pounds of quinine and salts of quinine are produced in Italy. The production of the world is estimated at from 230,000 to 260,000 pounds per year, as follows: Germany, 56,250 pounds; Italy, 45,000 pounds; France, 40,500 pounds; England, 27,000 pounds; America, 63,000 pounds; India, 12,250 pounds.

The two Italian factories produce 45,000 pounds of the sulphate of quinine, viz: 40,500 pounds at Milan, 4,500 pounds at Genoa. The first of these employs 45 hands, the second 15.

The Milan factory ships largely to all parts, furnishing much to Russia, France, and Austria. England receives two-thirds of her supply and Holland one-half of hers from the same source.

Efforts will be made to acclimatize the cinchona in Italy, to increase the supply and lessen the cost of the product. Its successful culture in India and Ceylon encourages the belief that it will grow wherever the soil is dry, the rain-fall large, and climate temperate. Many parts of the United States meet these conditions, and notably where its product is needed.

The culture of the cinchona in our country would cheapen an indispensable medicine and open a new industry to capital and labor.

In this connection some facts reported by Mr. E. Van Estvelde, the consul-general of Belgium in Italy, are instructive. He reports that the best varieties of cinchona have been successfully acclimated in British India. The government there cultivates chiefly the *Cinchona succirubra*, which has a red bark and contains a large quantity of febrifuginous alkaloids, and the *Cinchona calisaya*, which has a yellow bark, and is better suited to the manufacture of quinine. The culture of the first has succeeded. Uncertainty still exists as to the *Cinchona calisaya*, and the Bengal government are examining the plantations of Java, where it has been cultivated with entire success.

The cinchona plantations are in two distinct regions of India, *i. e.*, north of the Nilgiri Hills, in the Madras Presidency, and on the slopes of the Himalayas.

Those of the government are as yet the most important, covering 1,300 acres on the Nilgiri Hills and nearly 3,000 acres in Sikkim. There are several private plantations of later date already producing marketable bark.

The red bark (*Cinchona succirubra*) has many febrifuge alkaloids, but little quinine. It was important, therefore, to determine the therapeutic value of these alkaloids and the cheapest means of extraction in order to furnish a good febrifuge at a moderate price. The medical commission recommended the extraction of cinchonine, cinchonidine, and of quinine by simple means, and the government now

sells a mixture of these three alkaloids under the name of "Cinchona Febrifuge."

As the price does not exceed 65 cents per ounce, this febrifuge is used in nearly all the hospitals of India and sold in large quantities to the public. The chief surgeon of the northeast provinces reports that the doctors are unanimous in declaring that the "cinchona febrifuge" is a medicine of recognized efficiency in the treatment of ordinary intermittent fevers, and that it is an excellent prophylactic for those who live or travel in marshy countries. Most doctors are, however, of the opinion that it is inferior to quinine as a therapeutic agent; that its effect is slower, and that it is insufficient to cure severe remittent fevers. That it is a medicine of value is shown by the increase of its use, which, as the following figures show, is remarkable: 1874–'75, 48 pounds; 1875–'76, 1,940 pounds; 1876–'77, 3,750 pounds; 1877–'78, 5,162 pounds; 1878–'79, 7,007 pounds.

The hospitals took more than 5,500 pounds in 1878–'79; and, as the use of quinine diminished in the same time about as much, it is proof, considering the cost of the last-named alkaloid, that the Indian Government saved about $125,000.

At the present time the government chemist of India is trying to produce a better febrifuge by mixing three sulphates, viz, cinchonine, cinchonidine, and quinine, of which the cost would be little higher.

Financially the plantations of Sikkim gave last year a net profit of $19,252.80, although not fully developed, or 4½ per cent. on the sum invested. By the prevention of disease the hospital expenses of the government were largely lessened.

The value of these facts in their relation to the United States is apparent.

MOSCOW.—United States Consul August Weber reports: For the month of February there were 1,137 deaths, of which 9 were by small-pox, 151 by typhoid fever, and 176 by other contagious or infectious diseases. The prevailing diseases were chronic pneumonia, 280 deaths; catarrhus gastro-intestinalis, 260; affections of acute respiratory organs, 261. Almost total want of drainage and the worst of pavements are the chief causes, especially in summer months, of the unhealthy condition of the city.

For the month of March there were 1,477 deaths, of which 14 were by small-pox, 177 by typhoid fever, 185 by other contagious or infectious diseases, 365 by pneumonia chronic, 307 by catarrhus gastro-intestinalis, and 431 by affections of acute respiratory organs.

NASSAU, BAHAMAS.—United States Consul Samuel P. Saunders reports that during the week ending July 10 yellow fever, or fever very much resembling it, has made its appearance in this island; confined to the suburbs of the city at present. Of the eight cases referred to, six have been that of children under fifteen. *Symptoms*, high fever, violent headache, and pains in back and limbs, followed in 36 or 48 hours with black hemorrhagic vomiting, dying after three days' illness.

PORT LOUIS, MAURITIUS.—United States Consul H. C. Marston, under date of June 18, forwards mortality reports for May, 1880, and comparative statement of the same month for the four previous years:

During May, 1880, there were 1,003 deaths, 600 of which were from fever; annual rate per 1,000, 33.7. May, 1876, 939 deaths, 535 fever; rate per 1,000, 32.6. May, 1877, 1,492 deaths, 962 fever; rate per 1,000, 49.6. 1878, 769 deaths, 406 fever; rate per 1,000, 26.4. 1879, 1,088 deaths, 600 fever; rate per 1,000, 36.6.

RIGA, RUSSIA.—United States Consular Agent P. Bomholdt, under date of July 5, states that although there is a sanitary commission in this city no records are kept of births, deaths, or prevailing diseases. Only in case of epidemics some information can be obtained from the medical authorities. The population is estimated at 130,000. There is no drainage, the refuse being removed in carts; but the sanitary condition of the city is superior to that of many of the larger towns in the interior.

SANTA CRUZ, ISLAND OF PALMA, CANARIES.—For the month of May there were 11 deaths; no prevailing diseases, and sanitary condition of city good.

SIDNEY, AUSTRALIA.—For the month of February there were 190 deaths, of which the proportion of zymotic diseases was 19.5 per cent., typhoid fever 4, and diarrhœa 22, being the principal causes of death.

For the month of March there were 210 deaths, of which zymotic diseases gave 16.2 per cent.; typhoid fever, 4; diarrhœa, 21.

For the month of April, 180 deaths; zymotic diseases, 17.8 per cent.; by typhoid fever, 7; dysentery, 5; diarrhœa, 6.

SINGAPORE.—United States Consul A. G. Studer reports for the first two weeks of June that there has been no appearance of any epidemic or infectious disease in the port or vicinity.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

FORT WASHAKIE, WYO.—Under date of July 17, Dr. W. H. Corbusier, U. S. A., states that measles, which for eight months past have been epidemic in a mild form among the citizens and Indians of the surrounding country, have again appeared at the post; two children in one family have been attacked.

KINGSTON, N. Y.—Dr. J. D. Terwilliger writes under date of July 17, that "burial permits are now required in that city; malarial fevers prevail to a considerable extent, and diarrhœal diseases are prevalent among small children, but mortality is not great."

LONDON, *July* 26.—A dispatch of this date states that the English steamer Derwent has arrived at Havre from the West Indies with yellow fever on board. Three persons died of the fever on the passage and 18 are convalescent.

PENSACOLA, FLA.—Dr. J. C. Whitney writes under date of July 20, 1880, that a case of "Chagres fever" occurred on board the schooner L. B. Wing, from Aspinwall, at Pensacola, and suggested to the local board the propriety of detaining said vessel for further developments.

SAN ANTONIO, TEX.—Dr. W. L. Coleman writes under date of July 15, that "malarial fevers have been more prevalent in San Antonio than ever before, and that several car-loads of rags have been shipped north from this point, which have been gathered principally by Mexicans among whom small-pox prevailed last year; it is possible that these rags may convey the germs of that disease to the points to which they are shipped, and it would be well for the authorities to look after them."

SILVER CLIFF, CUSTER COUNTY, COLORADO.—Dr. A. Comstock writes under date of July 20, 1880, that this is a two-year old infant city of between 5,000 and 6,000 occupants, located by chance, like so many mining camps, in the mineral-bearing portions of our frontier. The elevation, by reports of Professor Hayden and surveys of the Denver and Rio Grande Railroad, is 7,800 feet above sea level. The entire "bench" or shoulder lying between the foothills of the Wet Mountains and the valley of Grape Creek, which stream is the outlet for the drainage of the Wet Mountain Valley into the Arkansas River, has a surface slope of about five degrees. It therefore leaves very little tendency to form cañons or ravines, and the drainage is ample for sanitary purposes. The rainfall, excepting along the mountain ranges, is very slight, not exceeding, by observation, about 29 inches annually, and nearly one-half of this falls during the month of afternoon showers—namely, July. The Wet Mountains lie in an easterly and the Sangre de Cristo Range in a westerly direction from the town, with a spur of the latter flanking us to the north, and which latter the Arkansas River breaks through, forming the widely famed "Grand Cañon." Thus we are surrounded on all sides but one by mountains, which have isolated peaks and lunettes above the snow line, and retain in certain basins some snow the year round. The Sangre de Cristo Range is about seven and one-half miles from us at the base in an air line, and not far from ten miles at the summits. The prevailing winds are from the southwest and are very constant, so much so that the early Jesuits called the valley "La Mo-ha-do," or "The Place of Winds." The mean temperature is low all the year, and even in midsummer the sun is oppressive only for a few hours, and the evenings cool, so much so, indeed, that not less than one-half of them in July are not comfortable inside the house without a slight fire. The daily variation in temperature is not unfrequently forty degrees, and sometimes sixty; the daily mean range is about 30°; the monthly mean range about 60°; annual range 120°. The difference occasioned in temperature from the shading of the sun, either by a passing cloud or an umbrella, is more obvious than in any other country I am acquainted with. The prevailing maladies are those of the circulatory and respiratory organs, and, with rare exceptions, persons suffering from either of the above, or from kidney affections, should avoid such close proximity to the mountains. Epidemic typhoid fever was reported as being very prevalent during the month of October, last year, and can be traced to causes easily remedied, but it is difficult to convince the authorities of its gravity. The water supply comes from springs near Grape Creek, and is brought to the town in tanks, from which each household is supplied daily, but many are so reckless as to keep the same two or more days in a stagnant condition. Much inconvenience arises from the absence of a running water supply, as no shade trees nor vigorous vegetation exists. There is no law enforced by which a record of births or deaths is available. No burial permits are required, and none of the medical faculty have been accustomed to keep notes of their cases. Most of the population are males, but with an increasing proportion of women and children as the place improves in domestic facilities. The death rate I cannot ascertain, but the indications are that it is very low, and it is, *for a mining camp*, the best regulated and, beyond any question, the healthiest in the State. The dust storms and the vegetable spores carried in the atmosphere are the greatest present enemies to comfort and health.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 17, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.		Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	FEVER. Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me	Bangor	20,000	3	9	23.5	2	1	1												1
	Portland	34,600	5	11	16.6	1														
N. H	Concord	14,000	2	8	29.8	1		2												
Mass	Boston	375,000	73	158	21.9	28	1	39	9	2				7	1			1	56	6
	Cambridge	50,400	14	24	25.0	4		8	2										10	1
	New Bedford	27,000	5	12	23.1	1		3	1		1			1					5	
	Newburyport	13,800	1	4	15.1			1												
	Marblehead	7,516	1	1	6.9															
	Plymouth	6,334	1	6	49.4				1											
	Lawrence	39,194	17	23	30.6	4		4						2	1	1				
	Lowell	60,000	27	41	35.7	4	1	15						3	2				20	
	Worcester	52,000	17	29	29.1	3		15						3						
	Brockton	13,608	1	2	7.7															
	Holyoke	22,000	10	16	43.9	3		6		3										2
	Milford	9,800	2	2	10.6															
	Chicopee	11,000	6	6	28.5			4							1					
	Fitchburgh	12,600	4	5	20.6	1			1											
	Somerville	23,500	8	11	24.4	1		6		1									7	
	Springfield	33,500	14	22	33.9	1		12							1				14	2
R. I	Providence	104,760	34	54	26.8	4		15	1			5						1	23	2
Conn	New Haven	60,000	17	35	30.4	5		6			1					1			8	
	New Britain	14,000	11	12	44.7	1	1	8	1					1						
	Waterbury	20,000	1	8	20.8		2											1		
Vt	Burlington	16,500	1	4	12.7															
N. Y	New York	1,111,940	489	813	38.1	83	4	297	20	3	9	3		48	4	6		4	376	27
	Brooklyn	564,448	208	327	30.8				16	3		14			2		1	6	166	12
	Yonkers	19,000	9	10	27.5	1		6										1	7	
	Poughkeepsie	21,200	9	14	34.5	1		7						1						
	Newburgh	18,043	1	4	11.6															
	Utica	35,000	6	10	14.9	1								2		3		2		
	Rochester	90,000	21	51	29.3	9		16											16	2
	Binghamton	17,600	3	7	20.4			3				2								1
	Buffalo	170,000	41	68	20.7	3	1	25	1			1		1					28	3
	Seneca Falls	6,000	2	2	17.4						1									
	Watertown	10,666	2	2	9.5									1						
N. J	Hudson County	209,000	68	119	29.7	14		34			1	1		7		11			39	2
	Newark	137,000	38	62	24.9	1	3	16	3	3				3						
	Orange	13,000	4	4	16.0			2												
	Plainfield	8,000	3	3	19.6			2				1								
Pa	Philadelphia	901,380	236	490	28.1	48	2		2	19		3		7				1		
	Erie	28,000	3	7	8.0	1		3											3	1
	Pittsburgh	153,880	42	80	27.1	7	1	13	6	5		3		5	3			2	19	6
Del	Wilmington	44,000	10	24	28.4	5					1	1								
Md	Baltimore	393,796	120	231	30.6	21		71	5	7	4	7		4	2	1		3	83	9
District of Columbia		170,000	53	91	27.8	10		22			1			4				2	33	3
Va	Norfolk	26,200	10	20	39.3			3	2		1			3					8	1
	Richmond	64,650	20	40	32.2	3		12		1	2			1					16	1
	Lynchburgh	21,000	6	10	24.6	1		1		1										
N. C	Wilmington	17,600	5	8	23.3	1		5												1
S. C	Charleston	57,000	28	42	38.3	5		2						3				2		
Ga	Augusta	27,012	2	12	22.6	2		1	1					2						
	Atlanta	41,548	11	25	31.3	4		6		2	1				2					
	Savannah	33,248	11	15	23.5	1								2						
Fla	Jacksonville	10,000	3	7	36.5	1		2							1	1				
	Pensacola	8,000		1	6.5															1
Ala	Mobile	40,000	4	14	18.3	1				1									1	1
	Selma	7,505	3	6	41.7	1		1			1							1		
La	New Orleans	210,000	40	100	24.8	11	1	4	2	1	6	3		2	4			1		
	Shreveport	8,033	2	3	19.5			1												1
Tex	San Antonio	20,507	4	8	20.1					1				1						
Ark	Little Rock	22,000	4	9	21.3	1		2										1		
Tenn	Nashville	43,543	17	34	40.7	4		5		2				1				4	11	2
	Chattanooga	13,000	4	7	28.1	1					2			2					2	
	Clarksville	6,000	2	3	26.1	1	1	1												
W. Va	Wheeling	32,000	5	9	14.7		3			2										5
Ky	Louisville	175,000	21	52	15.5	5		9	1	1									12	2
Ohio	Cincinnati	280,000	79	154	17.7	11		33	3					11	3			2	45	5
	Cleveland	175,000		108	32.2	2		40		1	10			4	2					1
	Dayton	39,000	12	22	29.4	3		6										1	7	1
	Gallipolis	5,500		1	8.5															
Ind	Evansville	30,000	6	11	19.1		2				1			1	1			1		1
	Indianapolis	75,350	19	37	25.0	2		10		2	1	1						1	15	
	Jeffersonville	10,500	1	4	19.9			1												2
	Richmond	12,750	3	3	12.3			2												
Ill	Chicago	500,000	254	375	39.1	17	1	122	19	2	4	8		12	4	4	2	1	156	24
	Aurora	12,059	1	4	17.4						1								1	1
	Peoria	34,275	4	6	9.1	1		2							1			1	2	
	Jacksonville	15,000		3	10.5															1
	Elgin	8,770		1	5.9	1														
Wis	Beloit	6,000		1	8.7															1
	Milwaukee	127,000	42	64	26.2	4	1	20	1		1	1		1		1			26	1
Minn	Saint Paul		25	35		1	1	18	1							1				3
Mich	Lansing	10,000		1	5.2															1
	East Saginaw	19,000	5	8	13.5			4	2											
Iowa	Keokuk	15,800		1	3.3															1
Mo	Saint Louis	500,000	108	190	19.8	15	1	43		2	7	3		3				4	71	5
Kans	Lawrence	8,500	3	6	36.7						1							1		1
Nebr	Omaha	30,000	17	23	40.0	2		10	2					1						1
Utah	Salt Lake City	25,000	3	6	12.5				2					2	1				3	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 17, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Cal .....San Francisco	305,000	24	70	11.9	8	.....	5	.....	1	1	.....	.....	4	1	.....	.....	.....	14	3
Sacramento	21,500	1	7	17.2	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Los Angeles	11,000	1	2	9.6	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,314,005	2,453	4,490	28.3	380	28	1,035	105	67	59	57	.....	158	37	31	3	45	1,303	146

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 153 white, 5 colored. Rate per 1,000, white 21.6, colored 52.2. Providence has 104,760 white, 4,000 colored; deaths, 52 white, 2 colored. Rate per 1,000, white 25.9, colored 26.1. Wilmington, Del., has 38,000 white, 6,000 colored; deaths, 18 white, 6 colored. Rate per 1,000, white 20.1, colored 52.2. Baltimore has 338,334 white, 55,412 colored; deaths, 181 white, 50 colored. Rate per 1,000, white 27.9, colored 47.2. District of Columbia has 114,000 white, 56,000 colored; deaths, 45 white, 46 colored. Rate per 1,000, white 20.5, colored 42.7. Norfolk has 14,900 white, 11,300 colored; deaths, 11 white, 9 colored. Rate per 1,000, white 38.5, colored 41.6. Richmond has 37,953 white, 26,697 colored; deaths, 20 white, 20 colored. Rate per 1,000, white 22.2, colored 39.3. Lynchburgh has 10,000 white, 11,000 colored; deaths, 4 white, 6 colored. Rate per 1,000, white 20.9, colored 28.5. Charleston has 25,000 white, 32,000 colored; deaths 7 white, 35 colored. Rate per 1,000, white 14.6, colored 56.7. Savannah has 18,229 white, 15,019 colored; deaths, 3 white, 12 colored. Rate per 1,000, white 8.5, colored 41.5. Augusta has 16,176 white, 10,824 colored; deaths, 5 white, 7 colored. Rate per 1,000, white 16.2, colored 32.8. Atlanta has 25,373 white, 16,175 colored; deaths, 9 white, 4 colored. Rate per 1,000, white 19.9, colored 32.8. Mobile has 28,000 white, 12,000 colored; deaths, 8 white, 6 colored. Rate per 1,000, white 14.9, colored 26.1. Selma has 3,425 white, 4,080 colored; deaths, 1 white, 5 colored. Rate per 1,000, white 15.2, colored 63.9. Jacksonville has 6,000 white, 4,000 colored; deaths, 4 white, 3 colored. Rate per 1,000, white 34.8, colored 39.1. New Orleans has 155,000 white, 55,000 colored; deaths, 68 white, 32 colored. Rate per 1,000, white 22.9, colored 30.4. Shreveport has 3,916 white, 4,117 colored; deaths, 1 white, 2 colored. Rate per 1,000, white 13.3, colored 24.7. Nashville has 27,874 white, 15,669 colored; deaths, 18 white, 16 colored. Rate per 1,000, white 20.7, colored 52.8. Clarksville has 3,000 white, 3,000 colored; deaths, 1 white, 2 colored. Rate per 1,000, white 17.4, colored 34.8. Chattanooga has 8,000 white, 5,000 colored; deaths, 5 white, 2 colored. Rate per 1,000, white 32.6, colored 20.9. Louisville has 153,125 white, 21,875 colored; deaths, 41 white, 11 colored. Rate per 1,000, white 14.0, colored 27.1. Total white population, 1,510,000; deaths, 655; annual rate per 1,000, 22.6. Total colored population, 411,471; deaths, 291; annual rate per 1,000, 36.9.

The following reports for the week ending July 17 are from places requiring burial permits and having less than 5,000 population:

Bridgewater, Mass., 4,000; no deaths. Brunswick, Ga., 3,900; deaths, 1, under 5 years. Edgartown, Mass., 1,400; no deaths. Morgan City, La., 2,018; no deaths. Murfreesborough, Tenn., 3,800; deaths, 4; under 5 years, 2; diarrhœa 2, lung diseases 2. Nantucket, Mass., 3,679; deaths, 3; enteric fever 1. Shelbyville, Tenn., 1,911; deaths, 2; consumption 2. Total population, 20,708; deaths under 5 years, 3; total deaths, 10; annual rate per 1,000, 25.2.

The following reports for the week ending July 17 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 10; under 5 years, 5; consumption 2, diarrhœa 1, lung disease 1. Allegheny, Pa., 78,000; deaths, 25; under 5 years, 10; consumption 3, diarrhœa 7, enteric fever 1, lung disease 1. Bath, Me., 10,000; deaths, 2; diarrhœa 1. Battle Creek, Mich., 7,500; deaths, 3; under 5 years, 1; diarrhœa 2. Boulder, Colo., 3,030; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Brattleborough, Vt., 6,000; deaths, 1. Calais, Me., 6,162; deaths, 1. Cambridge, N. Y., 1,850; deaths, 1. Carrollton, Miss., 700; no deaths. Cedar Keys, Fla., 1,500; deaths, 2; under 5 years, 1; malarial fever 1. Circleville, Ohio, 6,400; deaths, 3; under 5, diarrhœa 1, puerperal 1. Corinth, Miss., 2,264; deaths, 2; under years, 1; consumption 1, malarial fever 1. Clinton, Mich., 1,205; no deaths. Columbus, Miss., 7,040; deaths, 4; under 5 years, 1; consumption 1, years, 2; diarrhœa 2. Cumberland, Md., 12,000; deaths, 2; under 5 years, 1; diarrhœa 1. Dallas, Tex., 10,400; deaths, 11; under 5 years, 8; consumption 1, diarrhœa 3, enteric fever 2, puerperal 1, whooping-cough 1. Davenport, Iowa, 23,000; deaths, 21; under 5 years, 11; diarrhœa 7, diphtheria 1, scarlet fever 6, lung diseases 1. Decatur, Miss., 1,000; deaths, 1; under 5 years, 1; diarrhœa 1. Fairfield, Conn., 3,748; deaths, 5; under 5 years, 2; consumption 2, diarrhœa 2. Fayette, Miss., 400; no deaths. Flint, Mich., 9,000; deaths, 3; under 5 years, 1; diarrhœa 1, consumption 1. Gunn City, Mo., 125; deaths, 2; under 5 years, 2; diarrhœa 1. Helena, Mont., 3,620; deaths, 3; under 5 years, 1; lung diseases 1. Huntingdon, Pa., 4,500; deaths, 5; under 5 years, 4; diarrhœa 3. Indianola, Tex., 900; no deaths. Iuka, Miss., 1,000; no deaths. Jefferson, Tex., 3,251; deaths 2; puerperal 1. Kenosha, Wis., 5,000; deaths, 2; under 5 years, 1; consumption 1. Key West, Fla., 1,700; deaths, 4; under 5 years, 2; consumption 1, croup 1. Lansingburg, N. Y., 7,150; deaths, 4; consumption 1, diarrhœa 2. Lebanon, Pa., 9,000; deaths, 5; under 5 years, 2; diarrhœa 1, malarial fever 1. Little Falls, N. Y., 6,910; deaths 3; consumption 1, diarrhœa 1. Louisiana, Mo., 5,200; deaths, 3; under 5 years, 1; diarrhœa 2. Madison, Ind., 9,009; deaths, 10; under 5 years, 6; diarrhœa 1, scarlet fever 3, lung diseases 1. Masillon, Ohio, 6,896; deaths, 3; under 5 years, 2; croup 1, diarrhœa 2. Milledgeville, Ga., 4,000; deaths, 1. Montgomery, Ala., 17,000; deaths, 4; under 5 years, 1. Mount Pleasant, Iowa, 4,500; deaths, 2; under 5 years, 1. Muscatine, Iowa, 8,412; deaths, 6; under 5 years, 4; consumption 2, diarrhœa 4. Muskegon, Mich., 11,300; deaths, 9; under 5 years, 5; consumption 1, diarrhœa 2, diphtheria 1, malarial fever 2. Natchez, Miss., 7,054; deaths, 2; under 5 years, 1; scarlet fever 1. Ocala, Fla., 1,000; deaths, none. Oshkosh, Wis., 16,030; deaths, 4; under 5 years, 2; consumption 1, diarrhœa 2. Painesville, Ohio, 5,000; deaths, 4; lung diseases 1. Pearlington, Miss., 1,200; deaths, 1; under 5 years, 1; malarial fever 1. Phœnixville, Pa., 6,688; deaths, 2; under 5 years, 1. Pleasant Hill, Miss., 253; deaths, 1. Port Gibson, Miss., 1,200; deaths, 1; under 5 years, 1. Port Jervis, N. Y., 10,000; deaths, 5; under 5 years, 2; diarrhœa 1. Ripley, Miss., 1,000; deaths, 1; under 5 years, 1. Rock Island, Ill., 12,000; deaths, 3; under 5 years, 1; diarrhœa 1. Springfield, Ohio, 21,000; deaths, 6; under 5 years, 4; consumption 1, diarrhœa 3. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 5; under 5 years, 3. Tampa, Fla., 1,200; deaths, 1; consumption 1. Titusville, Pa., 9,000; deaths, 4; under 5 years, 3; croup 1, diarrhœa 1, enteric fever 1. Tuskaloosa, Ala., 2,000; deaths, 2; under 5 years, 2. Winchester, Va., 5,000; deaths, 2; under 5 years, 1; diarrhœa 1. Winona, Minn., 10,000; deaths, 1; under 5 years, 1. Youngstown, Ohio, 15,000; deaths, 3. Total population, 442,951; deaths under 5 years, 106; total deaths, 221; annual rate per 1,000, 25.7.

MISCELLANEOUS.

Rear-Admiral Wyman, in a dispatch to the Navy Department of July 21, states that "St. Jago de Cuba is in a most unhealthy condition, which I do not find mentioned in the NATIONAL BOARD OF HEALTH BULLETIN of June 26. There were 131 cases of yellow fever and 102 cases of small-pox during the month of June; about one-half of those attacked recovered."

Note.—No reports have been received from the consul at Santiago de Cuba for any part of the month of June.

Dr. W. M. Clark, secretary State board of health of Tennessee, writes under date of July 20, that it is the intention of the State board of health to place inspectors at Grand Junction, Corinth, Decatur, and probably Chattanooga.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	89	1			10																	1	2			2																20	11	2	96
Albany Hospital	Albany, N. Y	do	125																																												
Emigrant Hospital	New York, N. Y	do	462	55		1	1						1	2		9						5	3	3		1			3					4	3	1	1	1	2		14				1		10	12	2	51
German Hospital	do	do	90	79		3								2											2																				18	24		72
Hart's Island Hospital	Hart's Island, N. Y	do	300	224																																									22	8		238
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	8																																										1		7
Rochester City Hospital	Rochester, N. Y	do	125	62			3	1						1												1																			11	9	4	60
Saint Mary's Hospital	do	do	320	236	2	2								2											2	3														1	2					7	8		235
Saint Barnabas Hospital	Newark, N. J	do	45	22		1		3																	1	1		2																	1	2		29
Saint Michael's Hospital	do	do	130	127	3	4		8					2	1		2						5	2	15										3		1								29	16	1	139
Memorial Hospital	Orange, N. J	do	13	13				1																																								13
Germantown Hospital	Germantown, Pa	do	25	22										1																				1											4	1	17
Jewish Hospital	Philadelphia, Pa	do	40	24																					1																				6	4		26
Saint Mary's Hospital	do	do	80																																												
Homeopathic Hospital	Pittsburgh, Pa	do	40	19																																										19
Freedmen's Hospital	Washington, D. C	do	300	225	2																				1																				12	13		224
Providence Hospital	do	do	160	128	2			26																	4	5		14																	18	19		126
Georgia Infirmary	Savannah, Ga	do	50																																												
Saint Mary's Hospital	Galveston, Tex	do	300	89	2		1	9					2	1		4									4	3		4					1	2		2								19	21	1	86
Cincinnati Hospital	Cincinnati, Ohio	do	500	279	1	2	3	8					6	2		8					1		5	2	1		6						1		1		2			2			2			88	78	8	281
Charity Hospital	Cleveland, Ohio	do	150																																												
Saint Luke's Hospital	Detroit, Mich	do	25	10																																								2		1	11
City Hospital	Saint Louis, Mo	do	411	217	2	3	1	13					11	5	1	22						3		4	9	5	1	21						2									72	65	7	217
Saint Louis Hospital	do	do	250	68				6								2									6	4		18																16	10		75
German Hospital	San Francisco, Cal	do	150	60	2			3					1	1		1					1			2									1											16	7	1	68
Naval Hospital	Chelsea, Mass	do	100	19		1																			1	2		2					2		3												16
Do	Brooklyn, N. Y	do	115	46				4						2														3					1		2										3		36
Do	Washington, D. C	do	50	17										1																														2	5		14
Do	Mare Island, Cal	do	77	27				4																																						27
Do	Pensacola, Fla	do	20	1																																											1
German Hospital	Newark, N. J	do	50	23			1														1	1	1	1		2		4							1										1	3	2	19
Riverside Hospital	New York, N. Y	Contagious diseases	150	5																																		2					1			1		4
Municipal Hospital	Philadelphia, Pa	do		9																																								1	2		10
Nursery and Child's Hospital	New York, N. Y	Women and children												2																																	2	
State Hospital for Women and Children	Philadelphia, Pa	do	18	12																																									3			15
Children's Hospital	Washington, D. C	Children	72	36									2	1	1	1																													8	4	1	39
Women's Hospital of Illinois	Chicago, Ill	Women	19	17																																									1	3	1	13
Women's Hosp. and Foundlings' Home	Detroit, Mich	Women and children	30	31										1																																3	3	1	32
Insane Hospital	Augusta, Me	Insane	400	420																																									2	1		421
New Hampshire Asylum	Concord, N. H	do	300	290																																									3	3		290
Lunatic Hospital	Boston, Mass	do	200	160																																									1	1		160
State Lunatic Hospital	Worcester, Mass	do	650	516																																									8	2	1	521
Retreat for Insane	Hartford, Conn	do	150	141																																									5	1	2	143
Hospital for Insane	Middletown, Conn	do	515	517																																									3	2	1	517
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1256	1263																																									11	10	1	1263
Hudson River State Hospital	Poughkeepsie, N. Y	do	243	240																																									4			244
Marshall Infirmary	Troy, N. Y	do	142	133				1								1							1																						11	5	1	138
Willard Asylum	Willard, N. Y	do	1594	1608			2																																						4	3	2	1607
State Hospital for Insane	Danville, Pa	do	700	467			1																																						3	3	1	466
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	579																																												
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	394																																									9	8		396
Eastern Lunatic Asylum	Williamsburg, Va	do	330	318			1																																						1	1	1	317
North Carolina Insane Asylum	Raleigh, N. C	do	283	284			1																																						2		1	285
Alabama Insane Hospital	Tuscaloosa, Ala	do	406	408																																									1	1	1	407
State Lunatic Asylum	Austin, Tex	do	350	355																																									3	3	1	354
Longview Asylum	Carthage, Ohio	do	670																																												
Michigan Asylum	Kalamazoo, Mich	do	660	653																																								5	5	1	652
Minnesota Hospital for Insane	Saint Peter, Minn	do	668	670																																									3	4		669
Insane Asylum	Saint Louis, Mo	do	329	333																																									12	1		344
Insane Asylum of California	Stockton, Cal	do	1117	1116			1																																						4		2	1118

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	July 10	1	10.4													64
Canada	Kingston	16,000	July 17	2	6.5													70.7
Bermuda	Hamilton	14,867	July 12	4	14.0													82.0
Do	do	14,867	July 20															83.4
Cuba	Havana	195,437	July 10	250	66.8				76		10		4					84.5
Bahamas	Nassau, N. P.	13,000	July 10	5	21.7			8	5									88
Guadeloupe	Point-a-Pitre	22,919	June 26	14	31.9													
Mauritius	Port Louis	64,908	May 23	40	32.2								1					70.9
Do	do	64,908	May 30	56	45.2													70.9
Do	do	64,908	June 6	47	37.8													72.6
Do	do	64,908	June 13	55	44.3													70.3
Mexico	Acapulco	3,500	June 19	6	89.4													85
Do	do	3,500	June 26	4	69.6													83
Do	do	3,500	July 3	3	44.7													81
Do	Matamoras	16,000	May 8	9	29.3						1							
Do	do	16,000	May 15	8	26.0													
Do	do	16,000	May 22	5	16.3													
Do	do	16,000	May 29	15	48.8													
Do	do	16,000	June 6	16	52.0													
Do	do	16,000	June 13	12	39.0						1							
Do	do	16,000	June 20	9	29.3						2							
Do	do	16,000	June 26	12	39.0													
Teneriffe	Santa Cruz	16,610	June 19	5	15.7					1	1	4				8	2	76
Do	do	16,610	June 26	9	28.3							6				8		75
Ireland	Queenstown	10,000	July 10	5	26.1													
Do	Belfast	230,000	July 10	83	23.7					4		17	4			3	1	
Do	Dublin	314,660	July 10	188	31.1						10		3		5		26	
Scotland	Glasgow	589,598	July 3	224	19.8								11				29	58
Do	Dundee	155,100	July 3	74	25.0							2	1	1		9		60.3
Do	Scotland	58,479	July 10	15	24.6												4	57.6
England	Liverpool	544,056	July 10	264	25.3							3	3	11	1	35	34	57.9
Do	Newcastle	148,000	July 3	51	17.8								1				4	63
Do	London	3,664,149	July 3	1,300	18.5						13		10				135	
Do	Tunstall	152,086	July 3	51	11.0												4	
Do	Bradford	197,196	July 3	51	13.5								1				3	
Do	Bristol and Clifton	213,500	July 3	93	22.7													59.7
Do	Sheffield	304,938	July 10	111	19.0													56.9
Wales	Cardiff	82,364	July 10	23	14.5					1							2	59.6
France	Paris	1,988,806	July 1	981	25.7						48		26				122	
Do	Rouen	104,902	July 10	44	20.9													59
Switzerland	Geneva	52,077	June 19	19	19.1													
Do	do	52,077	June 26	19	19.1													
Do	do	52,077	July 3	11	11.0													
Holland	Amsterdam	316,952	July 3	171	28.1								7				1	64
Do	Rotterdam	150,378	July 10	78	27.1							3	1	15				
Germany	Berlin	1,087,500	June 26	1,066	51.0							18	7	1	1	127	66	
Do	Bremen	107,000	June 26	50	24.4													
Do	Brunswick	74,000	July 3	38	26.3												3	
Do	Hamburg	405,000	June 19	185	23.8												7	
Do	Breslau	276,000	June 26	167	31.5								3				24	
Do	Frankfort	128,000	July 3	53	21.6													74
Do	Mannheim	50,500	July 10	26	26.9													63
Saxony	Dresden	218,000	June 26	113	27.0							2	2			7	7	62
Do	Chemnitz	91,236	June 26	52	29.8												6	65
Do	Leipsic	150,836	July 3	70	24.1								2				7	65
Do	do	150,836	July 10	52	17.9												3	
Belgium	Brussels	395,159	July 3	164	21.4						1		5				2	
Italy	Genoa	180,000	July 10	90	26.1							5	1					
Austria	Trieste	128,223	June 26	81	32.9					3	3							
Do	Vienna	746,243	July 3	379	23.2						13		6				7	68
Hungary	Buda-Pesth	333,551	June 26	220	34.9						3			3			2	
Russian Poland	Warsaw	357,169	June 26	213	33.0						1							71
Sweden	Stockholm	169,429	June 12	78	25.2												12	72
Do	do	169,429	June 19	73	23.6												9	61
Do	do	169,429	June 26	82	26.5												8	61
Norway	Christiania	116,801	June 26	43	19.0					12		1				20	3	61
Do	do	116,801	July 3	45	20.1					15	2	4				23	4	61
Spain	Carthagena	76,000	July 3	55	37.1													77
Do	Alicante	34,926	July 3	19	28.5							2	1					
Do	Cadiz	65,028	June 26	34	27.3													75
Do	do	65,028	July 3	39	31.3													75
Do	Seville	138,000	June 20	62	23.3						1				2		6	72
Do	do	138,000	June 27	92	34.8										1		14	72
Do	do	138,000	July 4	109	38.1						3				4		22	72
Morocco	Tangier	15,000	June 19	33	114.8					14	3					2		73
Do	do	15,000	June 26	33	114.8					17	5			2				73
Barbary	Tripoli	20,000	June 26	7	18.3													68
Cape Colony	Cape Town	35,000	June 14	21	32.8													64
Do	do	35,000	June 21	21	31.3													62
Egypt	Alexandria	220,000	July 3	206	48.8													
Seychelles Islands	Mahe	12,000	May 29	4	17.4													79
Do	do	12,000	June 5	2	8.7													78
Do	do	12,000	June 12	4	17.4													80
Do	do	12,000	June 19	1	4.3													76
East India	Bombay	644,405	June 1	401	30.3						7		1				34	85
Do	Calcutta	429,435	June 5	144	17.4		4				2		3				1	

National Board of Health

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FOSTER, M.D. 33 E. 28th ST. N.Y.

GAUGING OF PUBLIC SEWERS.

[Report of GEORGE E. WARING, JR.]

NEWPORT, R. I., *July* 19, 1880.

SIR: Appended hereto please find my report on the gaugings of sewers in different parts of the country, which have been carried on during the past year under my direction by the order of the National Board of Health.

Respectfully, yours,

GEO. E. WARING, JR.

Dr. T. J. TURNER,
Secretary National Board of Health.

The purpose of these gaugings was to determine the size of conduit needed for the removal of the greatest amount of sewage matter produced by given populations; in other words, to determine the degree to which it would be safe to reduce the sizes of public sewers in cases where the object is only to remove the foul sewage matters of households, manufacturing establishments, public institutions, &c. No attempt was made at an elaborate scientific examination of the flow, beyond what was necessary for this one purpose.

It has been almost the universal custom up to this time, in planning a system of sewers for a town, large or small, to regulate the sizes of the sewers with a view to the removal not only of domestic and manufacturing wastes, but also of a considerable amount of rainfall. This custom is open to several objections:

(1.) Sewers large enough for the removal of storm-water are so much too large for domestic sewage that they must inevitably be foul and in a bad sanitary condition, except when flushed by storm-water. As storm-water is often withheld for many weeks together, and often at a season when the decomposition of deposits in the sewer is most active and injurious, this condition constitutes a very grave sanitary defect.

(2.) While the cost of storm-water sewers may be borne with tolerable ease in a city where the whole abutting property is built up, the distribution of such a charge among the scattered inhabitants of a more village-like town, where lot fronts are often very much larger than in the city, constitutes a serious burden—so serious, indeed, as to be in many instances prohibitory.

(3.) Aside from the foul air produced in the sewers themselves, the decomposition of the filth which accumulates in the catch-basins, by which street-water is admitted to the sewers, is often a source of most serious offense, if not of danger.

(4.) By extending the underground removal of storm-water to the very crests of the elevations of a town, the gutter flow, even at points where it could cause no inconvenience, is so much reduced as to prevent the cleansing of the gutters, which would otherwise be effected with each storm.

So serious are the objections above cited, that I have found in more than one case serious opposition to the construction of sewers on the part of local sanitary authorities. In Baltimore, for example, where the removal not only of surface water, but of the liquid wastes of households, is effected by surface drainage only, a very influential portion of the community strenuously resists all projects for sewerage, because of the advantage that they believe now to be derived from the cleansing effect of storm-water flowing through the streets.

It seems to me more than questionable whether it would not be better to preserve the surface removal of rain-water in all parts of the town where its accumulation would rarely amount to a serious interference with the use of the streets, and where injury to private property is not to be apprehended. This would enormously reduce the length and consequently the cost of the storm-water system, and would at least confine to certain limited localities the objectionable features which are now so prominent.

There seems to be good ground for the belief that if the sizes of sewers can be adjusted to the removal of foul wastes only, not only will their condition be very much improved, but their cost will be so vastly reduced as to bring their advantages within the reach of the smallest communities.

As the most important step in determining the practicability of the changes above indicated, the National Board of Health commissioned me to institute such a series of gaugings as would determine the actual pipe capacity required. Formulæ in use among engineers would lead to substantially the same result with actual gaugings; but their educational effect would be less marked, because calculations based upon scientific formulæ are less readily comprehended by the average municipal ruler.

In pursuance of the instructions of the Board, I have instituted the following gaugings:

a. A sewer in Madison avenue, in New York, having, with its branches, a total length of about 7,000 feet, and occupying a district about half built up with houses of good class.

b. A sewer in a single street in Providence, R. I.

c. A sewer with a single short branch in Burlington, Vt.

d. Six sewers in a closely-built part of the city of Milwaukee, Wis.

e. The sewers draining the New York State Lunatic Asylum, at Poughkeepsie.

f. A characteristic sewer in the city of Poughkeepsie, N. Y.

g. The sewers draining the Massachusetts Hospital for the Insane, at Taunton, Mass.

h. A large sewer in Saint Louis, Mo.

The total result of these gaugings affords a very fair average result, covering a sufficient variety of conditions, upon which I submit the following summary of the facts developed:

Madison avenue sewer, New York.

This gauging was intrusted to Stevenson Towle, esq., civil engineer, the engineer in charge of the sewer department of New York, who kindly consented to make the investigations. Unfortunately, his other occupations did not enable him to complete the work, and I am only able to say that the greatest flow of the Madison avenue sewer was discharged through a notch (in a wier) 4 inches wide, which it filled to a depth of $3\frac{1}{2}$ inches.

Providence, R. I.—Pine street sewer.

This investigation was made by J. A. Judson, esq., civil engineer, whose report may be summarized as follows: The total length of this sewer is 1,391 feet. Its grade varies from 0.86 per 100 to 4.18 per 100. The district which it drains contains 60 houses, all of which are residences, and 41 of which are connected with the sewer. The ganging in this, as in all other cases, was taken at the time of the greatest use of water of the week, in this case on Monday morning, between the hours of 8 and 11. The depth of flow was measured at intervals of 15 minutes. The population tributary to the sewer numbers 267. The result showed that the greatest flow of sewage reached a depth of 0.4375 inches in the 12-inch sewer. In the reducer, which brought the current into a channel having a radius of 3 inches, the greatest depth of flow was 0.875. A pipe 1.84 inches in diameter, running full at the same velocity, would carry the greatest flow of sewage from this population of 267.

Burlington, Vt.—College street sewer.

This gauging was made by A. R. Dow, esq., city engineer. The total length of this sewer and its branch is 2,790 feet. Its grade varies from 0.435 per 100 to 3.39 per 100. The district which it drains contains 85 houses, of which 54 are connected with the sewer. Forty-nine of these are dwelling-houses, and 5 are stores and shops. The population tributary to the sewer embraces 325. The ganging was taken at intervals of 15 minutes from 7.30 a. m. to 10.30 a. m. The result showed that the greatest flow of sewage reached a depth of 1.2 inches in a pipe of 3-inch radius. A pipe 2.25 inches in diameter, running full at the same velocity, would carry the greatest flow of sewage from this population of 325 persons.

Milwaukee, Wis.

These ganges were made by A. H. Scott, esq., civil engineer, of the city engineer's office, in the sewers of Detroit, Martin, Chestnut, Biddle, Wisconsin, and Huron streets.

The gaugings of the Huron street sewer are of especial significance. This sewer is 42 inches in diameter. The grade of the sewer at the point where the gaugings were taken was about 1 in 400. The area tributary to the sewer is about 70 acres, all nearly level, closely built, containing 500 houses, mostly dwellings, and a total population of 4,035. One hundred and thirty-two of the buildings are not connected with the sewer; the remaining 368 buildings contain a total population of 3,177, all of whom are tributary to the

sewer. There are several hotels, saloons, small factories, and livery stables; so that the district is fairly representative of an average city area.

The greatest flow in the main sewer on "washing day"—the greatest flow of the week—attained a depth of 6 inches, the diameter of the sewer being 42 inches.

The channel being reduced to a diameter of 10 inches, the greatest depth of the flow was 4.5 inches. Reduced to a diameter of 8 inches the depth remained the same—4.5 inches. Reduced to a diameter of 6 inches, it reached a dep.h of 5.5 inches.

The influence on the velocity of the stream by increasing its hydraulic mean depth is illustrated by the following figures:

"Forty-two-inch sewer, 6 inches deep; cross-section of stream, 121.3 square inches.

"Ten-inch sewer 4.5 inches deep; cross-section of stream, 33.1 square inches.

"Eight-inch sewer 4.5 inches deep; cross-section of stream, 27.7 square inches.

"Six-inch sewer, 5.5 inches deep; cross-section of stream, 27.14 square inches."

Poughkeepsie, N. Y.—Hudson River State Hospital.

This gauging was made by J. A. Judson, esq., civil engineer. This institution uses a daily average of about 80,000 gallons of water. The entire waste, including boiler-house, laundry, and kitchens, is discharged through a main sewer 12 inches in diameter. Its least fall is 1 foot in 100 feet, and its *average* fall is about 5 feet in 100 feet, so that its contents flow at high velocity. On the day of examination, January 17, 1880, the hospital had 301 inmates—241 patients and 60 employés. The flow was measured between 9 a. m. and 12 m., at intervals of 10 minutes. The maximum discharge took place at 9.30. The channel was reduced to a diameter of 6 inches, and the measurements were made with a thin strip of wood set edgewise to the current. The maximum flow attained a depth of 3.25 inches. At 9.20 it had attained 2.50 inches, and at 9.40 it reached only 2.75 inches. At 11.20 it again touched 3 inches.

A concise statement of the case would be this: 301 persons consuming 80,000 gallons of water per day, being 265 gallons per head, produced an amount of sewage sufficient at its maximum to create a stream in a 6-inch pipe 3¼ inches deep.

The greatest flow (3.25 inches) would have been carried by a pipe 4.25 inches in diameter, running full at the some velocity.

Poughkeepsie, N. Y.—Market street subdistrict sewer.

This gauging was conducted by J. A. Judson, esq., civil engineer. This is a 15-inch vitrified pipe sewer, draining Church street, Noxon street, and a part of Market street. The total length of the sewer delivering at the point of gauging is 2,766 feet. The number of houses tributary to the sewer was 39, and the population 426. The greatest flow of their sewage, measured in a pipe 6 inches in diameter, was 2.25 inches. It might all have been carried in a pipe a trifle more than 3 inches in diameter.

Taunton, Mass.—State Lunatic Hospital.

The gaugings at this hospital were conducted by J. A. Judson, esq., civil engineer. This hospital is situated about one mile south of the city, on elevated ground, near Mill River. The building is large and is abundantly supplied with water from its own steam-pumping works, about 40,000 gallons per day being used for all purposes, including the laundry. The main sewer is a 10-inch iron pipe. This sewer carries away, in addition to roof water, the entire waste of the establishment with the exception of the laundry, which delivers through an independent sewer to be referred to hereafter.

The flow of the 10-inch sewer was reduced to a diameter of 6 inches, and gaugings were taken at the usual intervals of 10 minutes during the time of the greatest use of water in the establishment. The summary of the report shows that the population occupying this hospital, 659 in number, produced sewage matter from all sources, except the laundry, sufficient to cause a depth of flow in the 6-inch pipe of only 1¾ inches at the greatest. A sewer 3 inches in diameter (2.96) would, with a flow of the same velocity, discharge the greatest amount yielded by this population.

A separate investigation of the flow of the laundry sewer showed very great variations, due to the fact that sometimes one and sometimes all of the large washing machines, five in number, were emptied suddenly, producing a great momentary increase. The minimum flow between 9.30 and 11.30 a. m. was less than 1 inch in depth (.875). At 10.40 a. m. the maximum flow was produced by the simultaneous emptying of all the machines. This raised the depth of water in the 6-inch pipe to 2¾ inches. In 10 minutes it had fallen to 1½ inches. The maximum flow would have been carried at the same velocity through a pipe 3.50 inches in diameter.

The entire maximum flow of the two sewers would have been carried, supposing the velocity to be the same, in a pipe 4.58 inches in diameter. (It is worthy of notice that it has been seriously proposed that the State of Massachusetts should pay one-half of the cost of a large 5-foot sewer because of its contributing to the sewage of the town this small stream, which would be amply accommodated by a 6-inch pipe.)

Saint Louis, Mo.—Compton avenue sewer.

This gauging was made under the direction of Robert Moore, esq., civil engineer, commissioner of sewers of Saint Louis. The sewer drains an area containing 1,370 houses, occupied by a population of 8,200. The total number of water taps was 1,391. The diagrams show gaugings taken every hour from 6 p. m., Monday, March 15, to 11 a. m., March 16, and from 8 a. m., March 19, to 8 a. m., March 23. These gaugings are averaged to make a typical day, in which, beginning at midnight with a flow of 75.32 cubic feet per minute, the flow was reduced to 70.26 cubic feet per minute at 2 a. m.; then it went 71.87 cubic feet per minute at 6 a. m., 130.26 cubic feet per minute at 11 a. m., 123.86 cubic feet per minute at 3 p. m., and steadily declined from this time until midnight, when the flow was 75.15 cubic feet per minute. The sewer is 7 feet 3 inches in diameter. It was obstructed by a dam, into which was built a 12-inch vitrified pipe sewer, which was continued for a length of 20 feet. The guagings were taken simultaneously at three different points, the average of these being the assumed depth through the 20 feet of 12-inch pipe. The greatest depth reached in this pipe was less than 7 inches (.5833 feet). Flowing at the same velocity, the whole stream would have been carried by a sewer a trifle more than 9 inches in diameter.

A computation of the amount of flow as compared with the population makes it evident that the sewer must have received a very large amount of ground water, for the total flow (over 1,000,000 gallons per day) amounted to more than 130 gallons for each member of the population, which, in a district having only about one water tap to each house, would be an impossible amount. It is usual to estimate a maximum daily use for domestic purposes of about 33 gallons per head of population. Deciding the total flow by this amount, we might assume that the 12-inch pipe used in this instance, carrying, at its maximum, less than 7 inches in depth of water, was doing the amount of work that would be required for removing the sewage only of a population of over 30,000, supposing the sewers to be absolutely tight so that only household wastes should enter them. This last example is, from its extent and from the minuteness with which its details were worked out, the most important of the series. It seems to me to furnish a conclusive argument—an argument fully sustained by all of the other gaugings—in favor of the safety of depending upon very small conduits for the removal of the dry-weather flow of sewage of cities and towns. It shows conclusively that the commission of the National Board of Health which recommended the system since carried out in Memphis—lateral sewers 6 inches in diameter, main outlet 20 inches in diameter—for a prospective population of 60,000, provided a wide margin for contingencies.

The result of these investigations cannot fail to be of the greatest practical value, especially in the case of the smaller towns, where the cost of constructing the usual storm-water systems is so great as to be prohibitory. Incidentally, the advantage to all towns, large or small, of adjusting the sizes of the sewers to the actual work of removing foul wastes must be regarded as most promising.

NOTE.—Robert Moore, esq., sewer commissioner of Saint Louis, has formulated a table based on the actual gaugings of the Compton avenue sewer (Saint Louis). He says, concerning it:

"When the water is running at the rate of 1,250 gallons per house per day, which, it is supposed, will never be exceeded, the depth of flow will be equal to three-quarters the diameter of the pipe.

"This rate is 23 per cent. greater than the *maximum* rate of the typical day in Compton avenue, and 60 per cent. greater than the average rate of the same day, and seems to me to be as great as need ever be counted on from house drainage alone."

It is at least four times as great as the usual consumption of water.

I have also received from him the results of the gaugings of the Ohio avenue sewer in Saint Louis.

The sewer is 7½ feet in diameter (necessarily very large, because of large amounts of storm water which it was constructed to remove). Its district contains 120 houses, with a population of 760. The *greatest* discharge of sewage from this population filled a 6-inch pipe *to a depth of only* 1½ *inches.*

THE INTERNATIONAL SANITARY CONGRESS AT TURIN.

The International Congress of Hygiene will meet at Turin September 6 and close September 12.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
	1880.																			
New Haven, Conn	May	60,000	30	92	18.4	16		3		4	3			9		2		1	12	1
Do	June	60,000	46	97	19.4	13	2	18	2	2	5	1		4		2		3	35	
Burlington, Vt	May	16,000	5	15	11.2	3		3		1				1					3	1
Amsterdam, N. Y	do	8,000	5	10	15.0									3						
Do	June	8,000	8	15	22.5	4	1		1					2						1
Dunkirk, N. Y	May	7,214		10	16.6			1						1						
Do	June	7,214		8	13.3				2	1										
Elmira, N. Y	May	20,436	8	14	8.2	1	1	1		1				3	1				2	
Do	June	20,436	9	32	18.8	3		2	5	2		2		2					11	1
Little Falls, N. Y	May	6,000	3	10	21.0	3						1		2						1
Do	June	6,000	1	3	6.0	1														2
Rochester, N. Y	May	90,000	51	138	18.4	13	1		9			7		16	7				38	
Elizabeth, N. J	June	28,000		32	13.7															
Do	July	28,000		55	23.6															
Hudson County, N. J	May	209,000	165	347	19.9	36	4	8	4		6	21		64	15	6		1	72	28
Do	June	209,000	237	412	23.6	34	7	97	5	4	11	10		29	6	1		1	155	28
Paterson, N. J	May	50,890	53	126	29.7	19	1	6				6		22						6
Do	June	50,890	81	126	29.7	9	3	1	36					12	3					6
Vineland, N. J	May	8,000	1	10	15.0									3						
Do	June	8,000	2	5	7.5	1				1										
Wilmington, Del	May	44,000				11	1	9	3			1		8	1	2				2
District of Columbia	do	170,000	158	346	24.4	74	2	33	1	6	4			35				5	61	11
Norfolk, Va	do	26,200	46	83	38.0	8		23	7	2	2	2		1	2				40	2
Do	June	26,200	42	80	36.6	6		23	4		4	3		3					33	4
Petersburg, Va	do	22,000	31	57	31.0	6		17		2	3			1	1	1				1
Do	July	22,000	59	97	52.9	4		25		2	6			2	2	1				1
Jacksonville, Fla	January	10,000	6	13	15.6	4		1						1		1				1
Do	February	10,000	3	22	26.4	13				1	1			1		1				
Do	March	10,000	9	21	25.2	4		1			1			2						1
Do	April	10,000	6	22	26.4	8		1						4						
Do	May	10,000	8	12	14.4	3		3							1					1
Do	June	10,000	9	16	19.2	1		4		1					3					2
Pensacola, Fla	do	10,000	1	7	8.4	1		3												1
Shelby County, Tenn	March	30,660	19	64	25.0	10		5	1		5	1		8						5
Do	April	30,660	23	85	33.3	13		4	1		8			19		2		2		5
Do	May	30,660	35	71	27.8	8		6	1	1	8			3		1		1		5
Do	June	30,660	35	85	33.3	13		18			9	1		2	1	1		1		3
Selma, Ala	May	7,070	8	11	18.6	3		1			1			1						
Do	June	7,070	11	23	39.0	4		2		2	3			1				4		
Brownsville, Tex	do	6,000	3	11	22.0	1		4			1									
Marshall, Tex	do	5,770	2	5	10.4			2												1
Nashville, Tenn	May	37,000	22	74	24.0	12		9		8	2			9				4		3
Do	June	37,000	63	115	37.3	8		26		4	1			4		2		28		3
Massillon, Ohio	do	7,800	4	13	20.0			2	3							2			4	2
Toledo, Ohio	May	50,000	24	53	13.9	6	2	4	2			1		11	2			2	12	
Lansing, Mich	do	10,000	3	12	14.4	1		3		1					1					2
Do	June	10,000	3	8	9.6	1			2					1						1
Chicago, Ill	May	500,000	421	756	18.1	64	34	59	44	8	7	27		126	13	8	4	8		19
Do	June	500,000	544	884		68	27	199	52	9	2	30		71	3	4	10	6		30
Milwaukee, Wis	May	127,000	90	184	17.4	13	4	4	16			3		22						8
Racine, Wis	do	16,000	4	16	21.2	5	1			1				1						
Watertown, Wis	do	12,000	4	13	13.0	1		1	3			8							9	
Do	June	12,000	6	14	14.0	2		1	2			7				1			10	
Saint Paul, Minn	April	51,080	10	36	8.5	6	1	2						3				3		2
Do	May	51,080	27	45	10.6	3		1		1				13						1
Do	June	51,080	23	51	13.0	6	1	9	2					6				1		4
Keokuk, Iowa	May	15,800		5	3.8							1		1						
Do	June	15,800		18	13.7	4		1						2						2
Sedalia, Mo	do	12,000	1	10	10.0	3		2								2			1	2
Oakland, Cal	May	42,500	10	37	10.5	4	1			3				6	1					4
Santa Barbara, Cal	do	3,500	2	4	13.7	1		1												

NOTES.

NEW HAVEN, CONN.—For May the mean temperature was 64°.3; highest daily mean, 80°.7 on the 26th; lowest, 48°.7 on the 1st; mean daily range, 17°.8; clear days, 7; rain on 9 days; rainfall, 1.24 inches; mean humidity, 67.6. For June: mean temperature, 70°.5; highest daily mean, 82° on the 28th; lowest, 56° on the 2d; mean daily range, 18°.1; clear days, 4; rain on 9 days; rainfall, 1.21 inches; mean humidity, 68.3.

BURLINGTON, VT.—For May: Marriages, 9; births, 29; mean temperature, 61°.5; rainfall, 1.46 inches; mean humidity, 60.9.

HUDSON COUNTY, N. J.—For May, 73 marriages and 186 births reported; annual birth-rate, 10.7 per 1,000; still-born, 24, or one to 7.7 births; 6 deaths are noted from sunstrokes, being the first time in six years that any have occurred from that cause in May; total from sunstroke in 1879 was 18. For June there were 110 marriages and 245 births reported; annual birth-rate, 14.0 per 1,000; still-births, 14, or 1 to 17.5 births. The death-rate in June increased 8 per 1,000 in Hoboken, 4 in Jersey City, and 2 in the county, as compared with the average of the last four years.

VINELAND, N. J.—June: Dr. Brewer notes, in connection with the increase of diarrhœal diseases in man, the prevalence of cholera in domestic fowls. The symptoms in chickens were those of Asiatic cholera in man; the disease was widely spread, and evidently contagious among the fowls.

DISTRICT OF COLUMBIA.—For May, of the 346 deaths, there were 164 white and 182 colored; annual rate per 1,000, white, 17.2; colored, 39.0; deaths under 1 year, 115, or 33.2 per cent. of all deaths; under 5 years, 46 per cent.; marriages reported, 73: white, 51; colored, 22; births reported, 297: white, 163; annual rate, 17.6 per 1,000; colored, 134; annual rate, 28.7 per 1,000; still-births, 31: white, 10, colored, 21; proportion of still-births to viable births, white 1 to 16.3, colored 1 to 6.4; mean temperature for the month, 70°.9; highest daily mean, 83°.5 on the 26th; lowest, 52°.7 on the 1st; highest noted, 96° on the 26th; lowest, 38° on the first; maximum daily range, 34°.5 on the 16th; minimum, 8°.5 on the 23d; mean daily range, 21°.9; clear days, 20; rain on 6 days; rainfall, 3.37 inches; prevailing winds, south.

NORFOLK, VA.—For May the deaths were 41 white, annual rate, 33.0; colored, 42, annual rate, 44.6 per 1,000; of deaths under 5 years there were 22 white, rate 17.7, and 24 colored, rate 25.5 per 1,000; still-births, 3. For June the deaths were 30 white, rate, 24.1; colored, 50, rate, 53.1 per 1,000 per annum; deaths under 5 years: white, 16, annual rate, 12.9; colored, 26, annual rate, 27.6 per 1,000; still-births, 6: 1 white, 5 colored. Mean temperature for May, 73°.4; highest noted, 98°; lowest, 45; mean humidity, 65.9; rainfall, 0.54 inches; prevailing winds, southwest. For June: mean temperature, 76°.6; highest noted, 101°; lowest, 58°; mean humidity, 61.8; rainfall, 5.34 inches; prevailing winds, southwest.

PETERSBURG, VA.—Deaths, 57: white, 20, annual rate, 24.0;

colored, 37, annual rate, 37.0 per 1,000; deaths under 5 years: white, 9, annual rate, 10.8; colored, 22, annual rate, 22.0 per 1,000; marriages, 11: 4 white, 7 colored; still-births, 5: white, 1, colored, 4. For July, deaths, 97: white, 33, rate, 39.6; colored, 64, rate, 64.0 per 1,000; deaths under 5 years: white, 19, rate, 22.8; colored, 40, rate, 40.0 per 1,000; marriages, 9: white, 4, colored, 5; still-births, 3: white, 1, colored, 2.

JACKSONVILLE, FLA.—Total deaths for 6 months 106; annual rate 21.2 per 1,000. Of the decedents 37 were non-residents, of whom 33 were in advanced steps of consumption on arrival, and 4 had heart diseases; deducting these the rate for the city falls to 13.8. Mean temperatures for the 6 months, in order, 62°.1, 64°.3, 68°.3, 71°.9, 73°.9, and 81°.0; extremes for each month, 77–45, 81–42, 86–43, 91–42, 95–58, and 100–69. Total rainfall 21.77 inches; greatest, 6.17 in February and 6.24 in May; least, 1.69 in March and 1.50 in April. Frost was noted on one day of each of the first four months of the year.

PENSACOLA, FLA.—Of the 7 deaths there were 4 white and 3 colored; the relative populations are not given.

SELMA, ALA.—For May the deaths were 4 white, rate 15.6; 7 colored, rate 21.1 per 1,000 per annum; under 5 years, 4 white, 4 colored. For June, total deaths, 7 white, rate 27.2; 16 colored, rate 48.1; under 5 years 3 white, 8 colored. Births in May: 13, 4 white, 9 colored; in June: 15, 8 white, 7 colored.

NASHVILLE, TENN.—For May, deaths 74, white 40, rate 18.5; colored 34, rate 37.1 per 1,000. Still-births 3 white, 2 colored. Mean temperature 74°.2; highest daily mean 79°.7, on the 31st; lowest 57°.5, on the 1st. Mean humidity, 69.5; rainfall, 4.05 inches; clear days, 15; rain on 8 days; prevailing winds, south. For June, deaths 115, white 61, rate 28.1; colored 54, rate 58.9. Still-births 4 white, 5 colored. Mean temperature 77°.9; highest daily mean 87°.5 on the 14th; lowest 66°.2, on the 2d. Mean humidity, 61.1; rainfall 3.95 inches; clear days, 9; rain on 7 days; prevailing winds, south.

SHELBY COUNTY, TENN.—The population used in the table is that last given for Memphis. The reports for January and February will be found in No. 41 of the BULLETIN. For March, deaths 64; white 26, rate 18.7; colored 38, rate 32.7. Still-births, 4. April, deaths 85; white 40, rate 28.8; colored 45, rate 38.7. Still-births, 12. May, deaths 71; white 27, rate 19.4; colored 44, rate 37.8. Still-births 4. June, deaths 85; white 34, rate 24.4; colored 51, rate 43.9. Still-births, 8.

TOLEDO, OHIO.—Five still-births in May; not included with the deaths.

LANSING, MICH.—Two still-births in June.

CHICAGO, ILL.—For May the mean temperature was 64°.5; highest daily mean 76°.5 on the 7th; lowest, 49° on the 21st. Highest temperature noted 85, lowest 37. Clear days, 15; rain on 12 days; rainfall 4.97 inches; prevailing winds, southwest. For June, mean temperature 70°.2; highest daily mean 82°.7 on the 11th; lowest 56° on the 15th. Highest temperature noted, 91°; lowest, 52. Clear days, 8; rain on 13 days; rainfall 3.50 inches; prevailing winds, southwest.

MILWAUKEE, WIS.—Deaths in May, 184; still and premature births, 29. Mean temperature, 61°.5; highest daily mean 77°.2 on the 18th; lowest 48°.2 on the 21st. Highest temperature noted 86° on the 7th; lowest 39° on the 15th. Maximum daily range 33°; minimum 10°; mean 18°.9. Mean humidity 62.3; rainfall 3.13 inches; clear days, 8; rain on 16 days; frost on the 15th; prevailing winds, southwest.

RACINE, WIS.—One still-birth in May.

SAINT PAUL, MINN.—In April the mean temperature was 42°.5; highest noted, 79°; lowest, 22°; clear days, 8; rain on 11 days; rainfall, 1.58 inches. In May, mean temperature 63°.1; highest noted, 91°; lowest, 40°; clear days, 10; rain on 16 days; rainfall, 1.50 inches. In June, mean temperature, 68°; highest, 88°; lowest, 47°; clear days, 8; rain on 15 days; rainfall 5.55 inches; prevailing winds southeast for the 3 months.

KEOKUK, IOWA.—In May, 3 still-births are recorded. Mean temperature, 69°.6; highest noted, 88°; lowest, 47°; mean daily range, 18°.5; mean humidity, 60.1; rainfall, 5.92 inches. In June, mean temperature, 74°.7; highest noted, 91°; lowest 54°; mean daily range, 16°.8; mean humidity, 66; rainfall, 3.06 inches.

OAKLAND, CAL.—For May 63 births are reported, being at the annual rate of 17.8 per 1,000. Of 5,511 scholars in the public schools, 139, or 2.5 per cent., were reported sick during the month.

NOTES ON THE FEVER IN NEW YORK, 1802–1805.

The following memorandum on "the fever in New York" was written between the years 1802–1805 by Daniel L. Coit, esq., of Norwich, Conn., and is forwarded for publication by President D. C. Gilman of the Johns Hopkins University:

In the month of July, about the 17th, we had a spell of pretty warm weather in New York; the docks became offensive, and the one at Coffee House Slip the most so. Two vessels from Norwich, Capt. Richard Chappel and Capt. William Davison, were both lying in this dock. Captain Chappel came into it first, and after being there a few days sickened with the malignant fever. I saw him after he was taken sick. After remaining two or three days sick he obtained a pilot, and went home to New London, but died very soon after arriving there. His pilot, a Mr. Harris, likewise died. On board of Davison's vessel John Smith was taken sick, whom I likewise saw when quite ill; Davison himself complained before he went away. Smith died on arriving in New London, or before the vessel arrived; Davison survived a day or two and then died. A brother of Chappel's, in another vessel, likewise took the disorder and died, as did one or two others, and about the same time a young man who was in a store on Jones's Wharf. This was the first occasion of alarm in the city, and till these deaths happened, it was supposed the city was healthy as usual. Several cases soon after happened in the neighborhood, and two instances at Old Slip, where a daughter of Mr. Rappelie and after her his wife both died. Soon after this one or two cases happened in Garden street in the neighborhood of a privy which was said to be in a bad situation and very offensive. The disorder then seemed to be spreading up and down the streets from Coffee-House to Burling Slip and to Old Slip and up Wall street. Many of the inhabitants moved from this part of the town about the 8th of August, at which time I moved my books to the house. After this cases seemed to be spread more about the town; Greenwich street and all the lower parts of the cross streets from Liberty to Read, both inclusive, had cases in them—Liberty and Courtland some of the first. But many people having moved over to this part of the town, it is difficult to determine whether the disorder was brought from the east side or originated on the west; but the difference between the west side and Broadway was very manifest, for the instances in Broadway were rare, while on the west side they were much increased. About the 20th there were a number of cases near the Bear Market and farther up Greenwich street; Mr. Stag, in Greenwich, by the market, died about the 22d, and his son, in a very airy situation in Robinson street, on the 29th. He probably took the disorder on the west side attending his father, as he was extremely cautious and went but little about; he did not see his father after he died. About the 22d, 23d, and 24th there were, I think, three days very cool and something windy, which it appeared to me would be favorable to those who were in health, for I think it must have removed most of the stagnant air. I at the time thought there would be fewer new cases (at the proper time) in consequence, and it now seems to be the case, for on the 28th and 29th the new cases reported were but six or seven each day, which is less than half the number which happened a few days preceding. I write these memoranda, however, from memory on the 30th, and of course they are not perfectly accurate.

Some circumstances look like an importation of this disorder, and some like a generating cause here. The first deaths which happened were very near to two vessels which it was apprehended might have contained the disorder, and the situation of the air in the slips was in a proper situation to receive it. It seems that at first it was confined to Coffee-House Slip, when many other slips were in a situation nearly as bad, in which people slept as well as there, and had the disorder then existed there they must have taken it. On the other hand, why are the cases so much more numerous on the North River and streets running up from thence to Broadway, if it has not originated there likewise? for the inhabitants of Broadway have been as much about the east side as the inhabitants of those streets. In reply to this, however, it may be said the air was bad in those low places, and in a proper state to receive and hold the infection when brought over from the east side, and that, though brought over by a single person, or by a few, it might, from them, become impregnated with the poison, and communicate the disorder to many others, while the purity of the air in Broadway might be an objection to the reception and propagation of the contagion there. Physicians are generally of the opinion that its origin is generally here, though it may be imported, and many of the city at large are of opinion that it is exclusively imported. It is of importance that the truth should be known, for, if our air is incapable of generating the disorder, a greater quarantine regulation might be the means of keeping this deadly malady at a distance.

On the 7th September I removed with my family to Phillipsburg, and had not afterwards so favorable an opportunity to watch the progress of the disorder, but the longer its continuance the more generally it seemed to be spread about the town. Almost all the eastern and western parts of the town became infected, and, though a very considerable part of the inhabitants had moved out, the number of cases and deaths increased. Broadway, however, continued remarkably healthy, even to the present time, October 6, there not having been more than three or four deaths in the whole street, and these probably were not occasioned by the air of the street. Whatever the cause of this malady is, it seems that it does not contaminate air which is good, but that when brought within the sphere of bad air its operation is then to increase and extend itself, and I apprehend that like leaven, it ceases not to operate till the whole of such air is contaminated. Bad air seems to be the fuel of the poison, the spark which sets it in action, and converts the whole into a consuming fire.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

ABSTRACTS FROM CONSULAR REPORTS.

BAHIA, BRAZIL.—United States Consul R. A. Edes reports for five weeks ending June 5 but 4 deaths from yellow fever; these occurred at quarantine hospital in persons coming from Rio de Janeiro. The disease had not extended to the city. There were 405 deaths from all causes in 5 weeks, giving an annual rate of 31.3 per 1,000.

BOMBAY.—The report for the first three months of 1879 gives a total of 5,457 deaths, with an annual rate of 33.8 per 1,000. Among the causes of death were: Malarial fevers, 1,981; dysentery, 417; diarrhœa, 299; continued fever, 119; small-pox, 142; cholera, 45, and measles, 25. There were 3,149 births recorded, being at an annual rate of 19.5 per thousand of population. Mean temperature for January, 76°.3; February, 76°.2; March, 79°.5. The rainfall was almost nothing. Of 4,303 primary vaccinations, 3,557 were successful, 173 failures or doubtful, and 573 result unknown.

COLOGNE, GERMANY.—United States Consul George E. Bullock reports for the month of May, 8 deaths from measles, 10 from scarlet fever, 3 from diphtheria, and 3 from whooping-cough. There were 330 deaths from all causes, in a population of 141,640, being at the rate of 27.9 per 1,000 per annum.

DEMERARA.—United States Consul Philip Figyelmesy forwards the report of mortality in Georgetown for the month of May, 1880. In a population of 29,064 there were 161 deaths, being at the annual rate of 66.5 per 1,000. Among the causes of death were: Dysentery, 8; diarrhœa, 6; malarial fevers, 3; syphilis, 6; dropsy, 11; consumption, 26; diseases of brain and nervous system, 18; heart diseases, 9; acute lung diseases, 7; old age, 11; debility and marasmus, 12; accidents and injuries, 5. The births were 101, or at the annual rate of 41.7 per 1,000.

GUADALOUPE, WEST INDIES.—United States Consul Charles Bartlett, sending reports from Point-a-Pitre for the three weeks ending June 19, states that yellow fever is abating, and no deaths are reported since June 5; there were two deaths in the week ending at that date. The deaths from all causes for the 3 weeks were 29, giving an annual rate of about 22 per 1,000; this is not high, but the sanitary condition of the port is not regarded as satisfactory.

LEEDS, ENGLAND.—United States Consul A. V. Dockery forwards the report of the health officer for the week ending June 5. During the week there were 131 deaths, in a population of 318,930, being at the rate of 21.4 per 1,000 per annum. Of the decedents, 33 were under one year and 29 were over 60 years of age. Among the fatal cases were: Diphtheria, 3; diarrhœa, 3; typhoid fever, 2; measles, 1; scarlet fever, 1, and whooping-cough, 1.

LYONS, FRANCE.—United States Consul B. F. Peixotto reports for the week ending June 19, six deaths from small-pox, one from typhoid fever, and nine from other contagious diseases. There were 144 deaths from all causes, and it is noted that the death-rate of 21.8 per 1,000 per annum is the lowest that has been observed for several months; the annual average rate for the whole of France is stated to be higher than the above. During the month of May the rate was 27.7, the deaths being 792; in the same period there were 746 births, giving an annual rate of 26 per 1,000. There were 258 marriages, or 9 per 1,000 per annum, and the still-births were 42, or one in 18 of the total number of births.

MALTA AND GOZO.—United States Consul C. B. Eynaud reports for the month ending June 15, a total of 351 deaths, in a population of 153,500, giving an annual rate of 27.4 per 1,000. Diseases of the heart caused 43 deaths, diarrhœal diseases, 51; consumption, 15; other lung diseases, 24; measles, 6; typhoid fever, 3; small-pox, 1; diseases of the brain and nervous system, 32; diseases of infancy, 66; old age, 14, and accidents, 4. Measles, which had been epidemic for several months, have nearly disappeared for want of material.

NASSAU, BAHAMAS.—The reports of United States Consul T. J. McLain for the three weeks ending June 5 represent the sanitary condition of the town as very good, and state that there is no yellow fever or other contagious disease at that date.

NASSAU, BAHAMAS.—Vice-Consul Samuel G. Sanders, under date of July 15, reports that a malignant fever, resembling yellow fever in its symptoms, has broken out in the island since July 5. During the week ending July 10 there were 9 cases, of which 8 were fatal. From that date to the 15th there were 12 cases, several of which were fatal. The disease is almost confined to children, but 3 adults have died of it. The symptoms, as described by the physicians of Nassau, are a very high fever, with violent pains in the head, stomach, back, and limbs. These symptoms are generally followed in 36 hours by black hemorrhagic vomiting, and death often occurs after 3 days of illness. The local government is making every effort to discover the cause of this outbreak, and all proper sanitary precautions are taken to prevent its increase. Clean bills of health are no longer issued to vessels bound for ports in the United States.

NEW ZEALAND.—The report of the registrar-general for the month of March shows a total of 215 deaths in a population of 130,225, being at the annual rate of 19.8 per thousand. The births in the same period were 489, or at the rate of 45 per 1,000 per annum. Of the decedents, 86 were under 1 year, 35 from 1 to 5 years, and 94 over 5 years of age.

In the four principal towns, with an aggregate population of 75,720, there were 125 deaths, being at the rate of 19.8 per 1,000 per annum. Of these deaths, consumption caused 7; other lung diseases, 7; heart diseases, 5; diseases of the brain and nervous system, 8; of the digestive organs, 7; diphtheria, 2; croup, 1; typhoid fever, 7; diarrhœa, 26; dysentery, 23; cancer, 3; debility and old age, 7; and accidents, 5. The mean temperature for the month was about 60°.

NINGPO, CHINA.—United States Consul E. C. Lord sends reports from May 8 to June 5, showing that the city is free from epidemics and diseases likely to be transported in ships. No statistics of mortality can be obtained; population estimated at 300,000.

PERNAMBUCO, BRAZIL.—United States Consul A. Cone sends reports for five weeks ending June 6, showing 7 deaths from yellow fever, 32 from small-pox, 8 from typhoid and 2 from typhus fever. There were 409 deaths from all causes, giving an annual rate of 33.7 per 1,000. The sanitary condition is rated good.

RIO DE JANEIRO, BRAZIL.—United States Consul Thomas Adamson reports as follows for the five weeks ending June 5: Deaths from yellow fever, 111; typhoid fever, 16; "pernicious" fever, 34; and consumption, 158. Deaths from all causes, 1,017, which gives an annual death rate of 32.1 per 1,000, the population being estimated at 330,000.

The report from the marine hospital at Jurajuba for the month of May shows 734 admitted, 173 died, 560 discharged, and 1 remaining. During the last week in May yellow fever was considered no longer epidemic at Rio, but was reported to have broken out at Vassouras, an inland town 150 miles distant, where it was said 11 out of the first 15 cases died.

SANTA CRUZ, PALMA, CANARY ISLANDS.—For the month of April United States Consul F. W. Lavers reports 12 deaths in a population of 6,070, being at an annual rate of 23.7 per 1,000. The causes of death are not stated. Mean temperature for the month, 67°.

ST. THOMAS, WEST INDIES.—United States Consul V. Thompson reports for the first two weeks of June 5 deaths from consumption, 2 from dysentery, and 2 from malarial fever. Total deaths, 18; population not given.

SHANGHAI, CHINA.—United States Consul O. N. Denny is unable to give any statistics of this city. During the three weeks ending June 5 no contagious disease had prevailed, excepting a very mild form of measles. Mean temperature, about 74°; population, 2,000.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

CAMDEN, NEW JERSEY.—Dr. A. Marcy reports, under date of July 27 that the outbreak of small-pox in that city has been mostly confined to one filthy district. The disease now shows a tendency to spread, but is not of a malignant type.

HAVANA, CUBA.—Advices to July 23 state that during the week ending on that day there were 61 deaths from yellow fever, a large proportion of which were among the citizens. The type of the disease for the last ten days has been milder than before. The Spanish brig *Pluton*, which sailed July 23 for New York, had some of her crew sick with yellow fever while at Havana, and as she discharged at a very foul wharf, she should be regarded as infected.

MASSILLON, OHIO.—Dr. A. W. Ridenour, under date of July 12, states that the prevailing diseases in that region are diarrhœa and malarial fevers.

MOBILE, ALA.—A dispatch from Dr. George A. Ketchum, president of the board of health, reports the arrival of the British bark R. W. Wood at quarantine, July 25, from Havana, with yellow fever on board. Of her crew of nine men, two had died, three are convalescent, and one is now sick at quarantine hospital. The vessel is 36 miles from the city, and all precautions are taken to isolate the sick.

The "Havana Weekly Report," of July 17, notes in the shipping list for July 13 the sailing of the British bark R. W. Wood, Willar, master, for Mobile.

The bill of health taken out by the said vessel is dated at Havana, July 10, and signed by U. S. Consul Henry C. Hall. This bill sets forth the following facts: The bark R. W. Wood, of 314 tons, cleared for Mobile on the above date; no medical officer on board; nine men in crew, and no passengers. Last from Georgetown, D. C., loaded with coal; left Havana without cargo, and with white stone ballast. The vessel was built in 1862, and was never in the West

Indies but twice before—once in Cardenas, in 1878, and last winter in Trinidad. She had then no sickness on board, and has had none during her present voyage; there is no proof that she ever had yellow fever or any other infectious disease on board. Sanitary condition good. Entered port (at Havana) June 19, and has been discharging cargo at a wharf at Regla, which place has been healthy this season, so far. Was thoroughly fumigated and washed with disinfectants July 9, the ballast being included in the operation. Crew all well, and none have been sick in this port. Sanitary condition of the harbor where the vessel lay believed to be good. For the week ending July 8, there were 71 deaths from yellow fever and 11 from small-pox in Havana. The vessel left "in free pratique for this port," which means that she had not been quarantined at Havana.

The quarantine report from Mobile, for the week ending July 27, notes under date of July 30, that the first mate of the bark R. W. Wood, who had been removed to quarantine hospital on the arrival of the vessel, died of yellow fever July 29.

NASHVILLE, TENN.—Dr. William M. Clark, secretary of the State board of health of Tennessee, states, in a communication of July 29, that scarlet fever prevails in an epidemic form in the city of Nashville. It is not malignant, however, and it is to be hoped that with the fine sanitary condition of the city it will be of short duration; otherwise the city is in an unusually healthful condition for this season of the year. West Tennessee has less sickness of every kind than for years. In Eastern Tennessee there are many cases of dysentery with typhoid tendencies, and it is almost, in some sections, particularly around Athens, epidemic in its character. Typhoid fever prevails to a considerable extent also in East Tennessee, confined as a rule to broken or hilly sections.

NEW ORLEANS, LA.—Advices to July 26 state that there have been four cases of yellow fever and three deaths among the crew of the bark Excelsior to date.

PHILADELPHIA, PA.—Dr. R. A. Cleemann makes the following report for the quarter ending June 30, 1880:

The second quarter of the year 1880 was unusually warm in Philadelphia, the mean temperature, calculated from the observations taken at the United States signal station in this city, having been 65° F., while the average for this quarter during the last nine years has been but 60.8° F. Each of its three months was warmer than common, but May was exceptionally hot, registering a mean temperature of 68.8° F., against a nine years' average of 61.9° F. The range of the thermometer was, however, also greater than usual, the lowest point to which the mercury fell in April being 29° F., while the highest attained was 96° F., in May—a difference of 67° F. In my opinion these variations are, from a hygienic point of view, conservative; the low temperatures offset beneficially the high ones; nevertheless the uncommon heat preponderated, and was accompanied, as will be seen below, by a marked rise in the death-rate.

The rainfall was much diminished, but 4.64 inches having been recorded, not quite half the average for this quarter during nine years. In this deficiency attention is again attracted especially by May, the whole rainfall of the month measuring but half an inch. The mean humidity of the atmosphere was rather less than the average for the whole quarter, having been marked 59.6° (saturation = 100°) against 61.3°; but in May this climatic feature did not differ from its average. Under the above meteorological conditions the whole number of deaths recorded during the quarter (April 4–July 3, thirteen weeks), exclusive of stillbirths (239) and those of children prematurely born (68), was 4,672, divided among the several months as follows: April (4 weeks), 1,354, May (4 weeks) 1,308, and June (5 weeks) 2,010. This mortality is equal to an annual death-rate of 22.05 (28.7) per thousand inhabitants living, making use of the figures given informally by the United States census officers, according to which the population of Philadelphia is counted 847,542 souls. While this is not intrinsically a high death-rate, it compares very unfavorably with the mortality in the corresponding period of the previous year, which was 3,617 deaths, or nearly a quarter less, equal to an annual death-rate of 17.3.

The second quarter in Philadelphia, with the exception of the fourth quarter, is, as a rule, the healthiest of the year, while the third quarter with its high temperature is accustomed to show the heaviest mortality. Is it to be wondered at then that the earlier summer heat in 1880 should be accompanied with an approach to the higher summer death-rate? In fact the mortality culminated in the last week credited to June, that ending July 3; for these seven days 608 deaths were recorded, a number nearly double that credited to any other week in the quarter. I have no doubt that part of this harvest of death had its seeds planted in the exceptionally warm weather in May.

Of those who died, 2,345 were males, and 2,327 females. Their ages were as follows: Under one year, 1,223; between one and two years, 368; between two and five years, 320; between five and ten years, 175; between ten and fifteen years, 67; between fifteen and twenty years, 126; between twenty and thirty years, 452; between thirty and forty years, 419; between forty and fifty years, 361; between fifty and sixty years, 327; between sixty and seventy years, 341; between seventy and eighty years, 305; and beyond eighty years, 188.

There appears in the distribution a much greater proportionate infantile mortality than is wont to be found at this season in Philadelphia. The cause is readily recognized in the large number of deaths recorded below under the headings cholera infantum, tabes mesenterica (marasmus), cephalitis, convulsions, debility, and inanition. That fell destroyer, heat, finds his easiest prey in the immature structures of the very young.

The following classification shows the number of deaths from each cause:

I. ZYMOTIC DISEASES 980, including *miasmatic diseases* 957 (small-pox, 21; measles, 42; scarlatina, 88; diphtheria, 72; croup, 62; whooping cough, 26; typhoid fever, 82; typhus fever, 5; erysipelas, 18; puerperal fever, 10; dysentery, 19; diarrhœa, 30; cholera infantum, 349; cholera morbus, 22; malarial fevers, 6; rheumatism, 24; cerebro-spinal meningitis, 27; other miasmatic diseases, 54); *enthetic diseases*, 2; *dietic diseases*, 18; *parasitic diseases*, 3.

II. CONSTITUTIONAL DISEASES 1,087, including *diathetic diseases* 169 (cancer, 105; other diathetic diseases, 64); *tubercular diseases*, 918 (tabes mesenterica, 198; phthisis pulmonalis, 667; other tubercular diseases, 53).

III. LOCAL DISEASES 1,924, including *diseases of the nervous system* 754 (cephalitis, 259; apoplexy, 68; paralysis, 93; convulsions, 229; sunstroke, 23; other diseases of the nervous system, 82); *diseases of the organs of circulation*, 207 (pericarditis, 33; aneurism, 8; heart diseases, 164; other diseases of the organs of circulation, 2); *diseases of the respiratory organs*, 491 (bronchitis, 99; pleurisy, 16; pneumonia, 320; other diseases of the respiratory system, 56); *diseases of the digestive organs*, 319 (enteritis, 131; peritonitis, 62; intestine diseases, 29; stomach diseases, 5; liver diseases, 78; other diseases of the digestive organs, 14); *diseases of the urinary organs*, 122 (nephritis, 14; Bright's disease, 74; other diseases of the urinary organs, 34); *diseases of the generative organs*, 20 (diseases of the ovaries, 11; uterus diseases, 9); *diseases of the organs of locomotion*, 9 (caries and necrosis, 8; joint diseases, 1); *diseases of the integumentary system*, 2.

IV. DEVELOPMENTAL DISEASES 493, including *developmental diseases of children* 40 (malformations, 33; teething, 7); *developmental diseases of adults*, 9 (childbirth, 3; puerperal convulsions, 2); other developmental diseases of adults, 4); *developmental diseases of old people*, 191 (old age, 191); *diseases of nutrition*, 253 (debility, 146; inanition, 107).

V. VIOLENT DEATHS, including *accident or negligence*, 154 (drowning, 44; otherwise, 110); *homicide*, 6; *suicide*, 25.

CAUSES NOT SPECIFIED, 3. Total, 4,672.

In comparison with the mortality of the previous quarter, that for the last three months shows an increase in every one of the above classes of disease, but by far the greatest excess is found in that of zymotic diseases. The large increment is due for the most part to the great number of deaths from cholera infantum, for almost all the other more prominent zymotics declined in their death-rate, the important exception being scarlatina.

The 88 deaths from the latter disease exceeded those in the previous quarter by 35, and though the whole number is not large among so great a population as ours, and the deaths were well scattered throughout the city, yet the higher figures have a certain significance in that up to the end of the previous year the disease had been declining, while there had been no marked increase in its mortality during the first quarter. However, this is not the season of the year when scarlatina is prone to become prevalent in Philadelphia, so that I do not expect a very decided increase in the number of deaths till at least the last quarter of the year.

The deaths from small-pox fell off one-third from their number in the previous quarter, justifying the opinion expressed in a former letter of the comparative insignificance of the present invasion of the disease. Measles, as anticipated, kept up its death-rate during April, but declined rapidly in May and June. Diphtheria and croup had a much lessened mortality as usual at this season, while typhoid fever, notwithstanding the mild winter, hot May, and prolonged drought, which I should have expected to determine a higher death-rate, was responsible for less than its average number of deaths at this time of the year. The confidence expressed that typhus fever would not fix its hold upon the community is seen to have been not misplaced, since only five deaths from it are reported, and of these four are credited to April, one to May, and none at all to June.

Of the 349 deaths recorded from cholera infantum, 328 were returned for June, and of these, 186 for the last week of the quarter, that ending July 3. The mortality, though above the average for this disease in the second quarter during several years past—years in which the deaths from cholera infantum have been diminishing in Philadelphia—is yet not exceptional. As we have seen above that the summer has been premature this year, bringing to us its mortality before the time, it is quite possible that the hot season may end sooner, so that the third-quarter will have a lessened death-rate, in comparison with its average, from this disease, and the whole summer, the mortality of which is gauged by the prevalence of cholera infantum, will not be behind those of other years in healthfulness.

Our board of health has for several summers been distributing among the masses a printed list of rules prepared by the Obstetrical

Society of Philadelphia, which gives specific, though brief, directions for the management of young children in warm weather, with reference to bathing, clothing, feeding, and the general preservation of favorable hygienic surroundings. Parents accept these rules with great eagerness, and I cannot doubt but that the instruction gained from them has saved many lives. The advantages of the smaller "squares" and the large park at Fairmount in counteracting the effects of the summer heat are duly appreciated, but benevolent citizens have established a "sanitarium" on an island in the Delaware River, immediately opposite the city, whither a steamboat carries free of charge all mothers with their children, sick or well, who wish to seek its benefits. There, away from the heated city, refreshed by the cooling breezes and a dip in the water, the little ones and their protectors may remain the whole day long; food is given them and even medical attendance is at hand, should occasion require the intervention of a physician.

The deaths registered from dysentery, diarrhœa, and cholera morbus, though really insignificant in number, increased, as usual, over the mortality from these diseases in the colder first quarter.

The whole number of deaths from "local diseases" is not very much in excess of that for the previous quarter, but this is because the diminished mortality from diseases of the respiratory system, apparent in this quarter, goes towards balancing the increased number of deaths from diseases of the nervous system, especially cephalitis, convulsions, and sunstroke, and those from diseases of the digestive organs, notably enteritis and liver diseases.

It is remarkable to have as many as 23 deaths from sunstroke at so early a period of the year, and, indeed, extraordinary to have any at all in May, which has furnished this year 5. I need not again refer to the premature heat in this connection.

For a long time the board of health had been urging an appropriation for constructing floating bath-houses which should be free to the public, and which could be so conveniently located along the banks of our rivers. These have now been built, and, moored to the wharves, are sought by thousands of men and boys, and, at certain hours reserved to them, by women and girls also, who thus have within their reach a most precious and agreeable means of preserving health during the warm weather.

PERU, IND.—P. Zimmerman, secretary of the local board of health, sends a report of mortality for the three months ending June 30, 1880. Twenty-nine deaths and 1 still-birth are recorded. Consumption caused 5 deaths, other lung diseases 6, diphtheria 1, paralysis 1, heart disease 1, peritonitis 1, puerperal fever 1, nephritis 1, old age 1, and accident 1. There were 9 deaths under 5 years, and 1 over 90 years of age. The population is not stated.

YOKOHAMA, JAPAN.—Dr. T. H. Streets, U. S. N., under date of July 9, writes as follows:

The health of Yokohama continues good, although cases of choleraic diarrhœa are reported. These, however, have nothing of an epidemic character, and are believed by the best informed foreign physicians of Yokohama to be due to the habit of the Japanese of eating unripe fruit.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 24, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.		Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me	Bangor	20,000	8	10	26.1		1	3												
	Portland	34,600	15	25	37.7	2		12												
N. H	Concord	14,000		4	14.9									1						1
Mass	Boston	375,000	102	192	26.7	23		79	7	3				7		1		1	88	7
	Cambridge	50,400	15	23	24.0	2	1	12						1		1			14	
	New Bedford	27,000	11	16	30.9	2		10						1						
	Newburyport	13,800	3	8	29.7	3		1												
	Marblehead	7,476	1	2	13.9	1			1											
	Fall River	49,000		39	41.5	3		21		1										
	Plymouth	7,094	1	4	29.3			1												
	Lawrence	39,144	15	19	25.3	2		11				1								
	Lowell	60,000	21	32	27.8	1		19				1		1					19	
	Worcester	52,000	19	31	31.1	1		19		1						1		1		
	Lynn	37,000	14	21	29.6	3		7		1				3				1		
	Brockton	13,608	1	3	11.5			1												
	Holyoke	22,000	3	5	11.9	1		4												
	Milford	9,800	1	1	5.3															
	Chicopee	11,000	6	9	42.7			7								1				
	Fitchburgh	12,600	3	6	24.7			5												
	Somerville	25,000	9	12	25.0			5											7	
	Springfield	33,500	16	23	35.4	1	2	6											13	
R. I	Providence	104,862	18	40	19.8	6		14	1			3							1	1
Conn	New Haven	63,300	13	28	23.1	4	1	8			1			1					10	
	New Britain	14,000	4	4	14.9			4												
	Waterbury	20,000	10	16	41.7			7		1	2									
Vt	Burlington	16,500	1	2	6.4															
N. Y	New York	1,111,900	370	641	30.1	68	10	198	16	4	8	5		35	4	5		8	272	27
	Brooklyn	564,448	145	252	23.7	25	2	156	7		3	2		13		3		2	123	8
	Yonkers	19,000	6	9	24.7	2		3						1					3	
	Poughkeepsie	20,200	4	6	15.1															
	Newburgh	18,043	9	10	29.0			4										1		
	Sing Sing	8,000	1	8	52.2			1	4					2		1				1
	Utica	35,000		4	5.9	1														
	Rochester	90,000	19	37	21.2	3			8	2		1		1					11	2
	Buffalo	170,000	26	51	16.7	5		18			1	1						1	23	
	Seneca Falls	6,000		2	17.3	2														
	Watertown	10,666		3	14.6	1					1			1						
	Lansingburg	7,150																		
	Little Falls	6,910	1	1	7.5			1												
	Port Jervis	10,000		1	5.2															1
N. J	Hudson County	209,000	53	100	24.9	11	2	27	3		2			3		2			39	5
	Orange	13,213	4	8	31.6															
	Plainfield	8,000	3	3	19.6			3												
Pa	Philadelphia	908,380	196	406	23.3	46	5	84	4	8		4		10			1	5		
	Pittsburgh	153,880	30	54	18.3	7		8	4	4		1		1	2			2	15	
	Erie	28,565	5	10	18.3	1								2					2	1
Del	Wilmington	44,000	6	15	17.9	3					1	1								
Md	Baltimore	393,796	81	152	20.1	20	2	36	2	9	1	4		2	1	2		2	56	6
District of Columbia		170,000	61	73	22.3	9	1	13	1	2	1	1		6		2			24	1
Va	Norfolk	26,200	11	20	39.3	2		2		1	4			1	1				9	
	Lynchburgh	21,000	4	7	17.2					2									2	
N. C	Wilmington	17,600	4	9	26.2			3				1							3	1
S. C	Charleston	57,000	26	30	27.4	5		4												3
Ga	Augusta	27,012	8	13	25.6	1		1	1		1									1
	Atlanta	38,000	5	9	12.4	1		3		2										
	Savannah	33,248		17	26.7	1		5			1									1
	Rome	5,000		2	20.9	2														
Fla	Jacksonville	10,000	4	6	31.3			3							1					
Ala	Mobile	40,000	6	12	15.6	3		2		1									3	
	Selma	7,505	4	6	41.7	2					2									
Miss	Columbus	7,947		2	14.6	1														
	Natchez	7,000		1	7.5															
La	New Orleans	210,000	25	93	23.0	18		7	3		8	3		3				2		3
	Shreveport	8,033		2	14.0	1					1									
Tex	San Antonio	20,597	4	10	24.3	2								1				1	1	1
	Brownsville	5,800	1	5	44.9	1						1							1	
	Austin	16,000	1	2	6.5	1		1												
Ark	Little Rock	22,000	6	8	18.9	1		2			2									
Tenn	Nashville	43,543	18	30	35.9	2		4				2		3				2	9	
	Chattanooga	13,000	1	4	16.0										1				1	1
	Clarksville	7,250	1	3	22.2															
Ky	Louisville	175,000	12	37	11.0	9		2						2	1	1		1	4	
Ohio	Cincinnati	280,000	39	83	15.4	8	1	18	2			4		2	3			2	40	3
	Cleveland	175,000		101	30.1	5	1	36	3	1		6		1						1
	Dayton	39,000	3	13	17.4	2		2											3	
	Gallipolis	5,500		3	25.5															
Ind	Indianapolis	75,350	18	33	22.3	7	1	6			1			6				1		
	Evansville	30,000	4	7	12.2			3		1										
	Richmond	12,750	2	6	24.5			3												
Ill	Chicago	503,298	189	280	29.0	14	1	93	20	1	1	2		10	1	1		3	120	13
	Aurora	12,059	1	3	13.0				1	1									2	
	Peoria	34,750	5	14	21.3	4		3		2				1	1				2	
	Jacksonville	15,000	1	1	3.5			1												
	Elgin	8,770	2	2	11.0			1												
Wis	Milwaukee	127,000	43	58	23.8	7	1	14	4		1			1					20	2
Minn	Saint Paul			23		2		9	2	1										1
Mich	East Saginaw	19,000	1	5	13.7	1		1												1
Iowa	Dubuque	24,000		6	13.0			1												1
	Keokuk	15,800	2	6	19.8	2		1												
Mo	Saint Louis	500,000	77	139	14.4	12		29	2	2	7	1		6				2	50	6
Nebr	Omaha	30,000	19	24	41.7	2		10	1					2						
Utah	Salt Lake City	25,000	2	4	8.3									1	1				1	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 24, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Cal .....San Francisco	305,000	37	87	14.8	19	1	9	.....	1	.....	.....	.....	.....	1	.....	.....	.....	14	3
Sacramento	21,500	4	10	24.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	3	5	23.5	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	1	7.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,233,447	1,914	3,663	23.1	397	33	1,089	97	52	50	45	.....	132	18	21	1	38	1,005	103

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 188 white, 4 colored. Rate per 1,000, white 26.5, colored 41.7. Providence has 100,862 white, 4,000 colored; deaths, 38 white, 4 colored. Rate per 1,000, white 19.6, colored 26.1. Sing Sing has 7,250 white, 250 colored; deaths, 8 white, 1 colored. Rate per 1,000, white 57.5, colored 208.7. Wilmington, Del., has 38,000 white, 6,000 colored; deaths, 14 white, 1 colored. Rate per 1,000, white 15.5, colored 8.7. Baltimore has 338,384 white, 55,412 colored; deaths, 114 white, 38 colored. Rate per 1,000, white 17.5, colored 35.7. District of Columbia has 114,000 white, 56,000 colored; deaths, 36 white, 37 colored. Rate per 1,000, white 16.5, colored 34.4. Norfolk has 14,900 white, 11,300 colored; deaths, 5 white, 15 colored. Rate per 1,000, white 17.5, colored 52.5. Lynchburgh has 10,000 white, 11,000 colored; deaths, 1 white, 6 colored. Rate per 1,000, white 5.2, colored 28.4. Wilmington, N. C., has 6,714 white, 10,286 colored; deaths, 1 white, 8 colored. Rate per 1,000, white 7.7, colored 40.6. Charleston has 25,000 white, 32,000 colored; deaths, 8 white, 22 colored. Rate per 1,000, white 16.6, colored 35.7. Savannah has 18,229 white, 15,019 colored; deaths, 8 white, 9 colored. Rate per 1,000, white 22.8, colored 31.2. Augusta has 16,176 white, 10,824 colored; deaths, 6 white, 7 colored. Rate per 1,000, white, 19.4, colored 32.8. Atlanta has 25,373 white, 16,175 colored; deaths, 2 white, 7 colored. Rate per 1,000, white 4.4, colored 22.5. Mobile has 28,000 white, 12,000 colored; deaths, 2 white, 10 colored. Rate per 1,000, white 3.7, colored 43.5. Selma has 3,425 white, 4,080 colored; deaths, 1 white, 5 colored. Rate per 1,000, white 15.2, colored 63.9. Jacksonville, Fla., has 6,000 white, 4,000 colored; deaths, 4 white, 2 colored. Rate per 1,000, white 34.8, colored 26.1. Columbus, Miss., has 3,500 white, 2,547 colored; deaths, white 2, colored none. Rate in table. New Orleans has 155,000 white, 55,000 colored; deaths, 60 white, 33 colored. Rate per 1,000, white 20.2, colored 31.3. Shreveport has 3,716 white, 4,217 colored; deaths, 2 white, colored none. Rate in table. Nashville has 27,874 white, 15,669 colored; deaths, 20 white, 10 colored. Rate per 1,000, white 23.0, colored 33.0. Clarksville has 4,000 white, 3,250 colored; deaths, 1 white, 2 colored. Rate per 1,000, white 13.0, colored 32.0. Chattanooga has 8,000 white, 5,000 colored; deaths, 2 white, 2 colored. Rate per 1,000, white 13.0, colored 20.9. Louisville has 153,125 white, 21,875 colored; deaths, 27 white, 10 colored. Rate per 1,000, white 9.2, colored 24.5. Keokuk has 15,000 white, 800 colored; deaths, 3 white, 5 colored. Rate per 1,000, white 19.3, colored 326.1. Total white population, 1,492,528; deaths, 553; annual rate per 1,000, 19.3. Total colored population, 361,704; deaths, 236; annual rate per 1,000, 34.3.

The following reports for the week ending July 10 are from places in which burial permits are required, and having less than 5,000 population:

Bridgewater, Mass., 4,000; deaths, 1. Cambridge, N. Y., 1,850; deaths, 1; diptheria, 1. Edgartown, Mass., 1,400; no deaths. Fairfield, Conn., 3,700; no deaths. Franklin, Ind., 4,000; deaths, 3. Morgan City, La., 2,018; deaths, 1; diarrhœa 1. Murfreesborough, Tenn., 3,800; deaths, 3; under 5 years, 1; enteric fever, 1. Shelbyville, Tenn., 1,913; no deaths. Saint Augustine, Fla., 2,500; deaths, 2; under 5 years, 1, diarrhœa, 1. Total population, 25,181; deaths under 5 years, 2; total deaths, 11; annual rate per 1,000, 22.8.

The following reports for the week ending July 24 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 12; under 5 years, 5; consumption 3, diphtheria 4, lung diseases 1. Allegheny, Pa., 78,000; deaths, 14; under 5 years, 12; consumption 2, diarrhœa 8, scarlet fever 1. Bath, Me., 10,000; deaths, 5; diarrhœa 1. Battle Creek, Mich., 7,500; deaths, 1. Belfast, Me., 5,278; deaths, 2; malarial fever 1. Boulder, Colo., 3,030; deaths, 2; under 5 years, 2; diarrhœa 2. Brattleborough, Vt., 6,000; no deaths. Calais, Me., 6,162; deaths, 3; consumption 1. Carrollton, Miss., 600; deaths, 1; diarrhœa 1. Chillicothe, Ohio, 11,000; no deaths. Circleville, Ohio, 6,400; deaths, 1; under 5 years, 1. Clinton, Mich., 1,205; no deaths. Columbus, Ga., 10,137; deaths, 3; under 5 years, 1; diarrhœa 1. Corinth, Miss., 2,264; deaths, 3; under 5 years, 2; diarrhœa 1, whooping cough 1. Cumberland, Md., 12,000; deaths, 6; under 5 years, 4; consumption 1, scarlet fever 1. Dallas, Tex., 10,300; deaths, 4; under 5 years, 3; puerperal 1. Davenport, Iowa, 23,000; deaths, 12; under 5 years, 8; consumption 1, diarrhœa 4, diphtheria 3, malarial fever 1, scarlet fever 2. Decatur, Miss., 1,000; deaths, 1; lung diseases 1. Fayette, Miss., 400; no deaths. Fernandina, Fla., 3,000; deaths, 1. Flint, Mich., 9,000; deaths, 3; under 5 years, 1; diphtheria 1, malarial fever 1. Franklin, Tenn., 1,633; deaths, 1. Gunn City, Mo., 125; deaths, 2. Helena, Mont., 3,625; deaths, 1. Huntingdon, Pa., 4,500; deaths, 1; diarrhœa 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; deaths, 1; under 5 years, 1. Jefferson, Tex., 3,251; deaths 3; under 5 years, 2; malarial fever 1. Kenosha, Wis., 5,500; deaths, 2; consumption 1. Key West, Fla., 1,500; deaths, 6; under 5 years, 4; diarrhœa 2, puerperal 1. La Salle, Ills., 10,000; deaths, 3; under 5 years, 2; diarrhœa 2. Lebanon, Pa., 9,000; deaths, 3; enteric fever 1, lung diseases 2. Louisiana, Mo., 5,200; deaths, 3; enteric fever, 1. Madison, Ind., 9,009; deaths, 6; under 5 years, 4; consumption 1, scarlet fever 2. Martinsburg, W. Va., 6,584; deaths, 2; diarrhœa 1. Meridian, Miss., 4,013; deaths, 5; under 5 years, 2; diarrhœa 2. Milledgeville, Ga., 4,000; no deaths. Montgomery, Ala., 17,000; deaths, 2; consumption 1, whooping-cough 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 1. Muscatine, Iowa, 8,412; deaths, 8; under 5 years, 5; consumption 1, diarrhœa 3, scarlet fever 1, lung disease 1. Muskegon, Mich., 11,300; deaths, 8; under 5 years, 6; consumption 1, diarrhœa 4, accident 1. Niles, Mich., 4,000; deaths, 2. Ocala, Fla., 1,000; no deaths. Okolona, Miss., 1,900; no deaths. Oshkosh, Wis., 18,030; deaths, 2; under 5 years, 1; diarrhœa 1. Painesville, Ohio, 5,000; deaths, 1; under 5 years, 1; diarrhœa 1. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; deaths, 1. Portsmouth, Ohio, 11,320; deaths, 6; under 5 years, 2; consumption 2, diarrhœa 1, accidents 2. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., 12,000; deaths, 5; under 5 years, 2; malarial fever 1, puerperal 1, diarrhœa 1. Rockland, Me., 7,500; deaths, 2. Santa Cruz, 5,000; no deaths. Springfield, Ohio, 21,000; deaths, 8; under 5 years, 1; consumption 2, scarlet fever 1, accident 1. Starkville, Miss., 1,454; deaths, 1; under 5 years, 1; diarrhœa 1. Steubenville, Ohio, 13,500; deaths, 1. Tampa, Fla., 1,200; no deaths. Titusville, Pa., 9,000; deaths, 1. Tuskaloosa, Ala., 2,000; deaths, 1. Winchester, Va., 5,000; deaths, 2; under 5 years, 2; diarrhœa 1, scarlet fever 1. Winona, Minn., 10,000; deaths, 3; under 5 years, 3; croup 1, diarrhœa 1, measles 1. Youngstown, Ohio, 15,327; deaths, 7; under 5 years, 3; consumption 1, diarrhœa 2, lung diseases 1. Total population, 485,097; deaths under 5 years, 81; total deaths, 175; annual rate per 1,000, 18.8.

LATEST ADVICES CONCERNING YELLOW FEVER.

HAVANA, CUBA.—Week ending July 24, deaths from yellow fever, 59, small-pox 7, typhoid fever 3. Probably 200 cases of yellow fever in the city at this date. Week ending July 31, deaths from yellow fever 51, small-pox 18. The following vessels are believed to have had yellow fever on board while at Havana: Spanish bark *Cisneros*, for New York, July 26; American bark *V. H. Hopkins*, for northeastern coast of United States *via* Matanzas, July 28; Spanish bark *XII de Junio*, for Charleston, S. C., July 29; Spanish brig *Cid*, for New York, July 30.

RIO DE JANEIRO.—July 3, deaths from yellow fever 7; total deaths 183; July 10, deaths from Yellow fever 5; total deaths 180.

GUADALOUPE.—July 10, at Pointe à Pitre 3 deaths from yellow fever; 15 from all causes. The people, and especially the merchants, keep the mortality from yellow fever as secret as possible.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE WEEK ENDING JULY 24, 1880.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	96		2		8																	1	1		2																	14	16	2	94
Albany Hospital	Albany, N. Y	do	125	54				2															1												1									10	16		48
Emigrant Hospital	New York, N. Y	do	462	51	3		1	2					7	6		10					1	1		1				3												1				12	10	2	51
German Hospital	do	do	90	72									2												7	2							7		1									17	20		76
Hart's Island Hospital	Hart's Island, N. Y	do	300	238																																								24	18	1	244
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	7																																										1	6
Rochester City Hospital	Rochester, N. Y	do	125	60				1																																				5	3		63
Saint Mary's Hospital	do	do	320	235		1	1						1	1											3	4							1										7	7	2	233
Saint Barnabas Hospital	Newark, N. J	do	45	29	1	1		3					1			1										2																	2	3		27
Saint Michael's Hospital	do	do	130	139	3	3		8						1		1					1		1	4	7		12					1		2								24	24	1	138
Saint Franciscus Hospital	Pittsburgh, Pa	do	125	57			1						1		1																												1	4	2	56
Memorial Hospital	Orange, N. J	do	13	13				1																		2					1		1										1	1	2	10
Jewish Hospital	Philadelphia, Pa	do	40	26																						1																	2	3		25
Saint Mary's Hospital	do	do	80	18		1	1	5					6	2		6									3	1		3					1					1		1			8	4	1	21
Homeopathic Hospital	Pittsburgh, Pa	do	40	19			1							1																	1	1										2	5	1	15
German Hospital	Newark, N. J	do	50	17																	2		3					4					1										4			23
Freedmen's Hospital	Washington, D. C	do	300	224	1																		1															2					20	9	3	232
Providence Hospital	do	do	160	126	1			27																	2	6		10															19	5	1	129
Freedmen's Hospital	Augusta, Ga	do	50	16				1																	1	1		2											1		1			2	1		18
Saint Mary's Hospital	Galveston, Tex	do	300	88				9						2		2									8	4		8					1	1		2							18	12		92
Cincinnati Hospital	Cincinnati, Ohio	do	500	281	1	5	1	3						2		6					2			7	4	1		8					1			1	4	2		5		2					60	57	6	254
Saint Luke's Hospital	Detroit, Mich	do	25	11									1																															1				12
City Hospital	Saint Louis, Mo	do	411	236	2	1	2	12					4	3		23						2		2	7	9		19								2								45	38	3	178
Saint John's Hospital	do	do	75	16									2			2									1			1																3				19
Saint Louis Hospital	do	do	250	70				6					6			8									6	7		17																17	14	1	70
Naval Hospital	Chelsea, Mass	do	100	16																													1											1				16
Do	Brooklyn, N. Y	do	115	36				4					1			1									1	2									2									1	1		36
Do	Washington, D. C	do	50	14																																									1			13
Do	Pensacola, Fla	do	20																																													1
Riverside Hospital	New York, N. Y	Contagious diseases	150	4																																							4	2		6
Municipal Hospital	Philadelphia, Pa	do	8																																								2	4		37
Children's Hospital	Washington, D. C	Children	72	39											1																												1	3		13
State Hospital for Women and Children	Philadelphia, Pa	Women and children	18	15																																									7		7
Women's Hospital of Illinois	Chicago, Ill	Women	19	14																																							5	3		420
Insane Hospital	Augusta, Me	Insane	400	418																																							3		2	201
New Hampshire Asylum	Concord, N. H	do	300	290																																										160
Lunatic Hospital	Boston, Mass	do	200	160																																							3	4		520
State Lunatic Hospital	Worcester, Mass	do	650	521																																							1	3	2	139
Retreat for Insane	Hartford, Conn	do	150	143																																							3	1		519
Hospital for Insane	Middletown, Conn	do	515	517																																							13	4	2	1271
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1256	1264																																										244
Hudson River State Hospital	Poughkeepsie, N. Y	do	243	244																																											
Marshall Infirmary	Troy, N. Y	do	142	138			1								1								1																				6	5		137
Willard Asylum	Willard, N. Y	do	1594	1607		2																																					6	6	4	1603
State Hospital for Insane	Danville, Pa	do	700	466																																							4	2		468
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	579	579																																							5	4		580
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	398																																							3	11	1	
Eastern Lunatic Asylum	Williamsburg, Va	do	330	317																																							2	1		318
North Carolina Insane Asylum	Raleigh, N. C	do	283	285																																							1			286
Alabama Insane Asylum	Tuscaloosa, Ala	do	406	407																																							1	1		407
State Lunatic Asylum	Austin, Tex	do	359	354																																							1			355
Longview Asylum	Carthage, Ohio	do	670	673																																							3	3	1	674
Michigan Asylum	Kalamazoo, Mich	do	660	653																																							9	3		658
Minnesota Hospital for Insane	Saint Peter, Minn	do	668	669																																							3	3		669
Insane Asylum	Saint Louis, Mo	do	329	344																																							6	18		332
Insane Asylum of California	Stockton, Cal	do	1117	1118			1																																				1	2	2	1115

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEATH FOR THE FOUR WEEKS ENDING JUNE 5, 12, 19, AND 26, FROM THE FOLLOWING PLACES.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	3.9	17.5
Concord, N. H	2.5	15.8
Boston, Mass	5.7	17.2
Cambridge, Mass	4.9	18.2
New Bedford, Mass	8.2	25.7
Newburyport, Mass	7.5	17.9
Marblehead, Mass	6.9	17.4
Fall River, Mass	4.3	20.1
Lawrence, Mass	6.0	16.0
Lowell, Mass	7.8	18.5
Lynn, Mass	6.8	13.7
Holyoke, Mass	6.9	14.5
Milford, Mass	2.6	9.3
Chicopee, Mass	4.7	17.8
Somerville, Mass	3.3	10.0
Providence, R. I	5.6	16.1
New Haven, Conn	7.2	17.0
Burlington, Vt	3.9	11.0
New York, N. Y	17.6	31.9
Brooklyn, N. Y	13.1	23.6
Yonkers, N. Y	5.2	13.0
Poughkeepsie, N. Y	3.1	9.0
Newburgh, N. Y	1.4	10.8
Buffalo, N. Y	4.1	12.3
Watertown, N. Y	3.7	11.0
Hudson County, N. J	9.7	21.1
Newark, N. J	8.3	18.8
Orange, N. J	6.5	13.0
Plainfield, N. J	3.3	9.8
Philadelphia, Pa	8.7	20.3
Erie, Pa	4.6	11.9
Pittsburgh, Pa	14.6	23.6
Baltimore, Md	17.1	28.8
District of Columbia	19.0	32.5
Norfolk, Va	23.4	43.3
Richmond, Va	16.9	30.1
Lynchburg, Va	8.7	19.9
Charleston, S. C	16.9	34.3
Augusta, Ga	14.9	25.1
Atlanta, Ga	8.5	20.4
Rome, Ga	7.8	20.8
Jacksonville, Fla	4.3	11.9
New Orleans, La	16.4	33.9
Shreveport, La	14.9	26.1
San Antonio, Tex	10.1	23.1
Little Rock, Ark	11.2	19.0
Nashville, Tenn	7.5	38.0
Clarksville, Tenn	15.2	36.9
Cincinnati, Ohio	15.8	24.1
Cleveland, Ohio*	.....	17.7
Dayton, Ohio	8.3	18.4
Gallipolis, Ohio	9.5	18.9
Evansville, Ind	10.4	16.6
Indianapolis, Ind	12.6	23.0
Richmond, Ind	6.5	18.6
Peoria, Ill	4.2	11.4
Elgin, Ill	0	6.1
Milwaukee, Wis	9.4	17.0
Saint Paul, Minn	4.8	11.5
Dubuque, Iowa*	.....	10.0
Keokuk, Iowa	3.3	14.8
Saint Louis, Mo	9.8	16.4
Omaha, Nebr	6.1	11.3
Salt Lake City, Utah	6.2	15.6
San Francisco, Cal	3.7	12.0
Sacramento, Cal	2.1	10.9
Los Angeles, Cal	7.4	18.6
Vallejo, Cal	3.4	6.9

DIAGRAM EXHIBITING THE SAME FOR THE MONTH OF JUNE, 1880, FOR THE FOLLOWING PLACES.

Amsterdam, N. Y	12.0	22.5
Dunkirk, N. Y*	.....	13.3
Elmira, N. Y	5.3	18.8
Little Falls, N. Y	2.0	6.0
Elizabeth, N. J.*	.....	13.7
Paterson, N. J	19.1	29.7
Vineland, N. J	3.0	7.5
Petersburg, Va	16.9	31.1
Pensacola, Fla	1.2	8.4
Selma, Ala	18.7	39.0
Brownsville, Tex	6.0	22.0
Marshall, Tex	4.2	10.4
Shelby County, Tenn	13.7	33.3
Lansing, Mich	3.6	9.6
Chicago, Ill	13.1	21.2
Sedalia, Mo	1.0	12.0

* Deaths under 5 not given.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	July 17	1	10.4													69
Prince Edward Isl'd	Charlottetown	12,000	July 24	1	4.3													69.7
Canada	Montreal	135,000	July 17	112	43.5								2					76.1
Do	...do	135,000	July 24	97	31.5										2			69.4
Cuba	Havana	195,437	July 17	228	60.9				71		4		3					83
Guadeloupe	Point-a-Pitre	22,919	July 3	16	36.4													
Mexico	Matamoras	16,000	July 3	2	6.5													
Do	...do	16,000	July 10	16	52.0						2							
Do	...do	16,000	July 17	14	45.5													
Brazil	Pernambuco	126,575	June 13	83	34.2						8		3					
Do	...do	126,575	June 20	85	35.0				1		6		3					
Do	...do	126,575	June 27	75	30.9						4		2					
Do	...do	126,575	July 4	67	27.6						15		1					
Do	Bahia	135,000	June 12	83	31.8						1		2					
Do	...do	135,000	June 19	79	30.3				1				2					
Do	...do	135,000	June 26	79	30.3						1		1					
Do	...do	135,000	July 3	86	33.0						2		1					
Do	Rio de Janeiro	330,000	June 26	194	30.7				6				1				4	
Ireland	Queenstown	10,000	July 17	8	41.7													
Do	Belfast	230,000	July 17	89	25.4					3		12	4			4	2	56.5
Do	Dublin	314,666	July 17	183	30.2						10		2		2		28	57.0
Scotland	Dundee	155,100	July 10	48	16.2									2		8		58.6
Do	Glasgow	589,598	July 10	264	23.3						1			5			26	58
Do	Leith	58,479	July 17	34	18.2												5	57.6
England	London	3,254,260	July 10	1,326	18.9						4		10		3		138	
Do	Tunstall	201,442	July 10	79	20.3												3	
Do	Bradford	197,196	July 10	77	20.4												11	
Do	Liverpool	544,056	July 17	269	25.8							2	2	9	1	21	27	60.9
Wales	Cardiff	82,364	July 17	24	15.2													
France	Paris	1,988,806	July 8	969	25.5						58		24				124	
Do	Havre	92,068	July 10	51	28.8													56
Do	Rouen	104,902	July 17	56	27.9													
Switzerland	Zurich	22,103	June 30	7	18.3								2				7	
Do	...do	22,103	July 10	9	21.2								1					
Holland	Amsterdam	316,952	July 10	166	27.3								6		1		3	61
Germany	Berlin	1,087,500	July 3	1,087	52.0							22	6	2	2	139	77	67
Do	Breslau	276,000	July 3	193	36.4								1				38	66
Do	Hamburg	405,000	June 26	195	25.1												6	
Do	Barmen	95,000	July 3	60	32.8								1				11	67
Do	...do	95,000	July 10	47	25.7												6	65
Do	Frankfort	128,000	July 10	46	18.7												3	65
Do	Brunswick	74,000	July 10	28	19.7												2	
Saxony	Chemnitz	91,236	July 3	65	37.3												6	70
Do	Leipsic	150,836	July 17	88	30.3								2				6	69
Belgium	Brussels	406,638	July 10	156	19.8								3				3	
Do	Antwerp	173,643	July 10	102	30.6					41	20	12	5					
Do	...do	173,643	July 17	110	33.0					26	26	13	2					
Denmark	Copenhagen	235,254	June 29	105	23.2					1		3	1			15		61
Do	...do	235,254	July 6	105	23.2					2	1	5	1			14		61
Italy	Rome	303,383	May 22	155	26.6					3	3						25	62
Do	...do	303,383	May 29	139	23.9								5				33	68
Austria	Trieste	128,233	July 3	62	25.2					3	3	1	1					
Do	Vienna	746,243	July 10	386	21.9						7				7		16	69
Hungary	Buda-Pesth	333,551	July 3	210	33.3						7		6				1	
Russian Poland	Warsaw	357,169	July 3	191	29.7						1							75
Sweden	Stockholm	169,429	July 3	96	29.6								1				15	64
Spain	Cadiz	65,028	July 10	54	44.3													78
Do	Carthagena	76,000	July 11	39	26.3													85
Morocco	Casablanca	6,000	June 4	1	8.7													84
Do	...do	6,000	June 11	4	34.7													85
Do	...do	6,000	June 18	2	17.4													88
Do	...do	6,000	June 25															89
Do	...do	6,000	July 3	5	43.4													91
Do	...do	6,000	July 10	4	34.7													93
Do	Tangier	15,000	July 3	29	100.9					16	2				3			74
Do	Tripoli	20,000	July 3	9	23.4													85
Do	...do	20,000	July 10	13	33.9													
Cape Colony	Cape Town	35,000	June 28	16	23.9													
India	Calcutta	429,535	June 12	162	19.7		3				1			3			1	87.9
Japan	Kobe-Hioge	18,282	June 19	5	14.3													
Do	...do	18,282	June 26	10	28.6													
Do	...do	18,282	July 3	7	19.9													

National Board of Health

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FOSTER, M.D. N.Y. ST. MAR. 28th

THE INTERNATIONAL SANITARY CONFERENCE.

The honorable Secretary of State transmits, in a communication to Dr. J. L. Cabell, the president of the National Board of Health, the following circulars to the ministers representing the United States at the capitals of the several maritime powers of the world, inviting those powers to send delegates to an international sanitary conference to be held in Washington, January 1, 1881:

DEPARTMENT OF STATE,
Washington, July 20, 1880.

SIR: I have to state for your information that in pursuance of a joint resolution of Congress, which was approved on the 14th of May last, the President has determined to call an international sanitary conference to meet at Washington, and to invite to join in the proposed conference the several powers having jurisdiction of ports likely to be infected with yellow fever or cholera, with a view of securing the adoption by the powers in question of an international system of notification as to the actual sanitary condition of ports and places under the jurisdiction of such powers, and of vessels sailing therefrom.

I inclose herewith a memorandum in which the circumstances which have induced this government to ask those of other nations to join in the proposed international sanitary conference are set forth, and which concludes with a statement of the specific propositions which the President would desire to submit to the conference.

In view of the urgent necessity which, according to the experience of this government, exists for prompt action in reference to this matter, I have to instruct you to lose no time in calling the attention of the government of to this subject, by transmitting for its information a copy of the memorandum above mentioned, and by asking it at the same time to take into consideration the expediency of holding a conference of the character proposed, and requesting it to communicate its views on the subject to this government at as early a date as may be convenient.

You may add that it is thought by the President that such delegates as may be appointed by the several powers to attend the proposed conference should be authorized to conclude, if deemed expedient upon consultation, an international convention, in relation to any proper subjects for international sanitary regulations to be proposed for the consideration of the governments interested.

In order that the proposed conference, if agreed to by the several foreign governments interested in the subject, may be held at as early a period as practicable, the President deems it expedient to suggest the first day of January, 1881, as a suitable date for the assembling of the conference in the city of Washington. In the event, however, that the government of should have occasion to prefer a different date for the meeting of the conference, this government will be ready to reconsider the question with a view to an alteration in the date.

I am, sir, your obedient servant,

WM. M. EVARTS.

MEMORANDUM IN RELATION TO POINTS PROPOSED TO BE SUBMITTED TO AN INTERNATIONAL SANITARY CONFERENCE.

DEPARTMENT OF STATE,
Washington, July 29, 1880.

A joint resolution of the Senate and House of Representatives of the United States, approved May 14, 1880, authorized the President "to call an international sanitary conference to meet at Washington, District of Columbia, to which the several powers having jurisdiction of ports likely to be infected with yellow fever or cholera shall be invited to send delegates, properly authorized, for the purpose of securing an international system of notification as to the actual sanitary condition of ports and places under the jurisdiction of such powers, and of vessels sailing therefrom."

This resolution has its origin in the practical difficulties which have been encountered in the administration of the regulations and rules recommended by sanitary experience, and framed by the legislation of the country, to the end of preventing the introduction and spread of yellow fever, cholera, and other contagious or infectious diseases in the territory of the United States. The extensive prevalence of yellow fever in certain parts of this country during the past two years, and the almost continual existence of the danger of the introduction of such contagious or infectious diseases as yellow fever and cholera by vessels coming to this country from infected ports abroad, gave rise to such legislative measures, but the difficulty in their application has been chiefly owing to the fact that in certain foreign ports where infectious or contagious diseases have existed, or were supposed to exist, the local authorities have shown some hesitation as to co-operating with the consular and medical officers of the United States in carrying out regulations deemed essential by this government as a sanitary safeguard.

Moreover, in consequence of the vague and untrustworthy evidence obtainable in some cases as to the sanitary condition of suspected foreign ports, vessels coming thence to the United States have in some instances, as it has afterwards appeared, been subjected to unnecessary quarantine in the ports of this country. On the other hand, vessels from non-infected ports of the United States have been compelled to submit to like unnecessary and vexatious delays by the quarantine regulations of other countries, based upon imperfect knowledge of the sanitary condition of American ports.

The joint resolution of Congress quoted above contemplates only securing "an international system of notification as to the actual sanitary condition of ports and places," and does not touch on the broader and more intricate question of the preventive sanitary measures imposed in the ports of each country, in conformity with its own laws, and in proportion to the danger of outward communication and internal spread of epidemic disease at the port of introduction. The Government of the United States, recognizing the essentially local character of quarantine requirements, and their adaptability to the sanitary conditions and risks in the districts where they are applied, would not seek to propose any international code of general quarantine laws, even did the system of State and Federal Governments in the United States favor bringing the sanitary precautions of the seaboard States from Texas to Maine, with all their varying conditions, under one governmental code.

But the President is of the opinion that the great inconveniences and losses which the commerce of the world has been and is now suffering from the delays and obstructions caused by unnecessary quarantines can, to a great extent, be relieved by the establishment, as contemplated by the Congressional joint resolution of May 14, 1880, of an international system of notification as to the actual sanitary condition of ports and places likely to be infected with communicable or epidemic diseases. And following the authorization of the resolution referred to, he has, therefore, deemed it proper to submit to the governments of the chief maritime powers the expediency of holding a conference at an early day in this city to consider the subject of a proper and applicable scheme of such international notification.

The specific propositions which the President would desire to submit to the proposed conference would include the following:

A. The establishment of a reliable and satisfactory international system of notification as to the existence of contagious and infectious diseases, more especially cholera and yellow fever.

B. The establishment of a uniform and satisfactory system of bills of health, the statements in which shall be trustworthy as to the sanitary condition of the port of departure and as to the condition of the vessel at the time of sailing.

The discussion of these points would involve, among others, the following questions:

I. Who should be the certifying officer or authority as to the sanitary condition of ports and places and of vessels?

II. How can the certifying authority obtain trustworthy information as to the actual sanitary condition of ports and places and as to the presence of contagious and infectious diseases?

III. When yellow fever or cholera exists at or in the vicinity of a port or place, what examination should be made of a vessel sailing therefrom to secure a trustworthy knowledge of her sanitary condition?

IV. To what extent, and under what conditions, should a clean bill of health be considered as affording satisfactory evidence that the vessel is free from danger of conveying infectious disease?

V. In what way can trustworthy information be obtained from ports or places in countries which have imperfect or unsafe quarantine and sanitary regulations, and which may be unwilling or unable to adhere to the proposed international system?

VI. Whether a schedule of graduated penalties could be fixed to be exacted from vessels for various offenses arising under the proposed international system?

MONTHLY REVIEW OF MORTALITY FOR JUNE, 1880.

The absence of reports from several cities has reduced the mean population for this month to 8,130,174, which is 96,133 less than that for May, and about the same as that for April. The reports of mortality for April may therefore be compared directly with those for June. It will be observed that the early and excessive mortality from heat diseases has not greatly affected the general death-rate, which has advanced from 20.22 in April to 20.24 in May, and 22.05 in June. This is due to the fact that the increase in deaths from heat diseases has been largely compensated by a reduction in pulmonary and zymotic diseases, as will appear from the following table and analysis:

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
June 5	7,674,160	2,863	19.46	1,182	8.04	41.26	657	4.47	22.95	388	2.64	13.55	269	1.83	9.40	106	0.72	3.70	78	0.53	2.72
June 12	8,322,410	3,125	19.59	1,449	9.08	46.37	610	3.82	19.52	371	2.33	11.87	239	1.50	7.65	130	0.81	4.16	92	0.58	2.94
June 19	8,284,692	3,518	22.16	1,784	11.23	50.71	657	4.14	18.68	417	2.63	11.85	240	1.51	6.82	122	0.77	3.47	90	0.57	2.56
June 26	8,239,436	4,238	26.83	2,417	15.30	57.03	671	4.25	15.83	436	2.76	10.29	235	1.49	5.54	135	0.85	3.19	87	0.55	2.05
Totals	32,520,698	13,744	.....	6,832	.....	.....	2,595	.....	.....	1,612	.....	.....	983	.....	.....	493	.....	.....	347	.....	.....
Means	8,130,174	3,436	22.05	1,708	10.96	49.71	648¾	4.16	18.88	403	2.59	11.73	245¾	1.58	7.15	123¼	0.79	3.58	86¾	0.56	2.52

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
June 5	28	0.19	0.98	70	0.48	2.44	268	1.82	9.36	41	0.28	1.43	46	0.31	1.67	22	0.15	0.77	42	0.29	1.47	.....
June 12	38	0.24	1.22	73	0.46	2.34	463	2.90	14.82	43	0.27	1.38	37	0.23	1.18	47	0.29	1.50	41	0.26	1.31	3
June 19	32	0.20	0.91	67	0.42	1.90	611	3.85	17.37	36	0.23	1.02	50	0.31	1.42	35	0.22	0.99	42	0.26	1.19	4
June 26	48	0.30	1.13	58	0.37	1.37	1,251	7.92	29.52	50	0.32	1.18	46	0.29	1.09	43	0.27	1.01	55	0.35	1.30	8
Totals	146	.....	.....	268	.....	.....	2,593	.....	.....	170	.....	.....	179	.....	.....	147	.....	.....	180	.....	.....	15
Means	36½	0.23	1.06	67	0.43	1.95	648¼	4.16	18.87	42½	0.27	1.24	44¾	0.29	1.20	36¾	0.24	1.07	45	0.29	1.31	3¾

Causes of death.—The reduction of the death-rate from pulmonary diseases has been from 5.34 to 4.16 per 1,000 since May, or 22.1 per cent., and, as observed last month, the decline in acute lung diseases was more than that for consumption; in June the latter disease shows a rate of 7.5 per cent. lower than in May, while other lung diseases have fallen 37.5 per cent. The difference in the rate of reduction is probably due to the exhausting effects of continued heat upon persons advanced in phthisis, partly balancing the otherwise favorable influences of the season. Diphtheria and croup show an equal reduction of rate, being 4 per 1,000 less than last month for each disease. Scarlet fever still shows a decreasing death-rate, having fallen from 0.48 to 0.43, or 10.4 per cent., since May, and 17.3 per cent. since April. Measles, which last month had increased about 5 per cent. as compared with April, now show a sudden reduction from 0.46 to 0.29 per 1,000, or nearly 37 per cent. Enteric fever was noted last month as having declined 17 per cent.; the reports for June show a further reduction of 6.9 per cent. since May. Malarial fever and whooping-cough have been so balanced in gain and loss in different parts of the country, that their general rate of mortality remains unchanged. Reference to the mortality from diarrhœal diseases for the successive weeks will show how rapidly the rate has advanced from 1.74 per 1,000 at the end of May, to 7.92 for the last week in June. Last year these diseases reached their highest death-rate, of 7 per 1,000, during the second week of July, which is usually the culminating point of heat diseases. In 1879, the reports for the last week in May gave a death-rate of 0.67 per 1,000 for diarrhœal diseases, so that the total number of deaths from heat diseases, which have begun so early this year, will probably far exceed the mortality of last summer. The deaths from diarrhœal diseases in June were equal in number to those from consumption and acute lung diseases combined, the mean rate being 4.16 per 1,000 for each.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,493,749	7,686	22.30	1,635	4.74	21.26	995	2.89	12.95	640	1.86	8.32	324	0.95	4.22	221	0.64	2.88
Southeast	1,365,770	3,067	29.29	486	4.64	15.84	334	3.19	10.89	152	1.45	4.95	46	0.44	1.50	36	0.34	1.17
Northwest	1,856,712	2,640	18.54	380	2.67	14.40	222	1.56	8.41	158	1.11	5.98	107	0.75	4.05	76	0.53	2.88

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	103	0.30	1.34	135	0.39	1.76	1,275	3.70	16.59	78	0.22	1.01	80	0.23	1.04	53	0.15	0.69	76	0.22	0.99	6
Southeast	10	0.09	0.32	50	0.48	1.63	757	7.23	24.68	55	0.52	1.79	38	0.36	1.24	62	0.59	2.02	80	0.76	2.61	.....
Northwest	31	0.22	1.17	82	0.57	3.10	540	3.79	20.45	30	0.21	1.14	57	0.40	2.16	28	0.20	1.06	22	0.15	0.85	9

Distribution of diseases.—In all three sections of the country consumption and acute lung diseases show a great reduction since May; in the Northeast, from 6.26 to 4.74 per 1,000, or 24.3 per cent.; in the Northwest, from 3.59 to 2.67, or 25.6 per cent.; and in the Southeast, from 5.32 to 4.64, or 12.8 per cent. But while consumption has been reduced nearly 9 per cent. in the Northeast and 11.6 per cent. in the Southeast, the rate has remained unchanged in the Northwest section. The mortality from acute lung diseases shows a great

decline since May; in the Northeast of 40, in the Northwest of 45.6, and in the Southeast of 15.2 per cent. Diphtheria has decreased nearly 16 per cent. in the Northeast, but is increasing in the other sections, having risen 6 per cent. in the Northwest and nearly 30 per cent. in the Southeast. Croup shows a reduction of nearly 12 per cent. in the Northeast, of 18.5 in the Northwest, and 25 per cent. in the Southeast, since May. Scarlet fever and measles have run nearly the same course since last summer. Both diseases were epidemic in some of the chief cities of the Northeast last year, then spread to the cities of the Northwest, and finally to those of the Southeast section. But, while measles are now on the wane throughout the country, scarlet-fever has declined only in the Northeast, advancing 5 per cent. in the Northwest, and 50 per cent. in the Southeast, which was the last section invaded by the disease. Enteric fever, which had abated in the Northeast last month, shows a further decrease in that section from 0.31 to 0.22, or nearly 30 per cent. In the Northwest the rate has advanced 18 per cent. and in the Southeast about 10 per cent. It was noted last month that whooping-cough had increased its death-rate by 9 per cent. in the Southeast, while the mortality was decreasing in the other sections. In June the rate has fallen 17 per cent. in the Northeast and 10 per cent. in the Northwest, but has advanced 20 per cent. in the Southeast. This indicates that whooping-cough, like scarlet-fever, diphtheria, and measles, has comparatively exhausted the available material for its extension in the higher latitudes, and shows an advance only in the field of latest invasion, where the climate and season would otherwise oppose its progress. Malarial fevers are now rife in the Southern part of the country, and will probably increase in fatality until October; an advance of 55 per cent. is noted since May for the Southeast section, while the rate has decreased 15 per cent. in the Northeast and 32 per cent. in the Northwest. It was observed early in this year that scarlet-fever found by far the larger portion of its victims in New England, Ohio, and Illinois, and, as it declined in those regions, spread over other parts of the country. On examining the increase of this disease in the Southeast section it appears that the city of Baltimore furnishes 29 out of the 50 deaths, or 58 per cent., while the population of that city is only 29 per cent. of the total included in the Southeast division. The mortality from diphtheria in Baltimore is also in excess of the ratio of population, showing 13 out of 36 deaths, or 36 per cent. Diphtheria also prevails in New Orleans to a greater extent than the relative population would allow; the population being only 15 per cent. of the total for the Southeast section, the deaths from diphtheria in June were 10 out of 36, or 28 per cent. of the whole mortality from that disease in the Southeast section. Measles exhibit a still greater relative mortality in New Orleans, the deaths being 23 out of a total of 38, or 61 per cent. Six months ago the mortality from this disease was almost confined to the cities of New York, Brooklyn, and Chicago, which for several weeks reported from 70 to 90 per cent. of the total mortality from measles. It is to be observed that, when such limitation of any disease to a few cities exists, the absence of a weekly report from a single city may produce a great but fallacious reduction in the general death-rate from the disease in question. In such cases the subtraction of the population of the missing city from the total does not preserve the balance, since the death-rate from the particular epidemic disease may be out of all proportion to the population. In estimating the value or significance of fluctuations in the general death-rate of any disease, this source of error, arising from irregular distribution of diseases and irregular reports from cities, is not to be overlooked. Up to the end of June there has been no report of vessels detained at quarantine stations on account of yellow-fever infection, though the disease prevails in Havana and Rio de Janeiro and has been reported at Nassau.

COLOR-BLINDNESS IN RAILROAD EMPLOYÉS.

The State of Connecticut has passed the following act directing the examination of railroad employés for color-blindness and defects of vision:

Be it enacted by the senate and house of representatives, in general assembly convened:

SECTION 1. The State board of health shall prepare rules and regulations for the examination and re-examination of railroad employés in regard to color-blindness and visual power, prescribing the method in which, and the intervals at which, such examinations shall be made, the maximum fee to be charged for each examination, the form of certificate to be issued by the examiners, and such other regulations as said board may deem necessary. Said board shall send a copy of such rules and regulations to every railroad company and trustee operating a railroad in this State, on or before the first day of July, 1880. Said board may from time to time make such changes in said rules and regulations as they may deem best, and communicate the same to said companies and trustees. Said board shall annually, in the month of May, recommend two or more medical experts to make the examinations above referred to, and the governor shall annually, on or before the first day of July, appoint not less than two medical experts, any one of whom shall be authorized to conduct the examination for color-blindness and visual powers, and issue certificates in accordance with the rules of the board of health.

SEC. 2. On or before the first day of October, 1880, every railroad company and trustee operating any railroad in this State shall cause every person in their employ as locomotive engineer or fireman, train conductor or brakeman, station agent, switchman, flagman, gate-tender, or signalman, to be examined at the expense of the railroad company by one of the examiners, to be appointed by the governor, in regard to color-blindness and visual power, and shall cause a like examination to be made of all persons employed after said date in either of the capacities named above, and shall cause re-examinations to be made in accordance with the rules prescribed by the board of health.

SEC. 3. Any railroad company or trustee operating any railroad in this State employing, after the first day of October next, in any of the capacities specified in the second section of this act, any person who does not possess a certificate of freedom from color-blindness and possession of normal visual power, duly issued in accordance with the provisions of this act, or knowingly employing in any of such capacities any person whose certificate has been revoked by the examiners, shall for each and every offense be punished by a fine of not less than two hundred nor more than one thousand dollars.

Approved March 25, 1880.

RULES FOR EXAMINATION OF RAILROAD EMPLOYÉS UNDER PRECEDING ACT.

Rule I.

All railroad employés requiring examination under the law of March 25, 1880, shall be divided into two general classes.

Class first shall include engineers, firemen, and brakemen.

Class second shall include train conductors, station agents, switchmen, flagmen, gate-tenders, and signalmen.

Rule II.

Certificates shall be given for each position in accordance with the succeeding rules for examination. Promotion from one class to the other requires re-examination and certificate.

Rule III.

Re-examinations shall be made: 1st, after any disease of the eyes; 2d, after injuries affecting the head or eyes; 3d, after any disease or trouble of the brain, and after long-continued illness, as typhoid fever; 4th, after mistakes or acts which call in question the visual powers; also, whenever directed by the board of health.

Rule IV.

The examiners shall report regularly to the State board of health, and their work shall at any time be open to the inspection of any member or members of said board.

Rule V.

The regulations for conducting the examinations and the standards for each class shall be determined by the board of health, and not by the examiners New rules and regulations shall be adopted from time to time as required, and alterations and amendments made.

RULES FOR CONDUCTING EXAMINATIONS.

Rule I.

For the *qualitative* estimation of color-blindness, the following tests are to be employed: Holmgren's Worsteds, the Tables of Stilling, Donder's Color Test Patterns, Pflüger's LETTERS WITH TISSUE PAPERS. Däne tests and Woinow's Revolving Cards may also be used.

For the *quantitative* test for color-blindness: Donder's Reflected Spots, Donder's Method with Transmitted Light, Holmgren's Shadow Tests shall be employed.

Rule II.

The following are the requirements for a certificate in the first class:

1. Healthy eyes and eyelids, without habitual congestion or inflammation.
2. Unobstructed visual field.
3. Normal visual acuteness.
4. Freedom from color-blindness.
5. Entire absence of cataract or other progressive disease of the eyes.

The second class shall have:

1. Healthy eyes and eyelids without habitual congestion or inflammation.
2. Unobstructed visual field.
3. Visual acuteness at least equal to $\frac{3}{5}$ without glasses and normal with glasses in one eye, and at least $\frac{1}{2}$ in the other eye with glasses.
4. Freedom from color-blindness in one eye, color-perception at least equal to $\frac{3}{4}$ in the other eye.

Rule III.

In the case of employés who have held their positions five years or

more, the standards required in each class shall be determined under special instructions from the board of health.

By order State board of health.

C. W. CHAMBERLAIN, M. D., *Secretary.*

Connecticut is a pioneer in this work in this country, being the first State to pass a law requiring examination of all railroad employés engaged in moving trains. The standards adopted are for the most part those agreed upon at the International Medical Congress at Amsterdam, September, 1879.

The forms of certificate are bound in books, the stubs retained for reference and tabulations.

ABSTRACTS FROM CONSULAR REPORTS.

ANTWERP, BELGIUM.—During the week ending July 17, there were 23 deaths from small-pox, out of a total of 110 from all causes. The authorities have declared small-pox as no longer epidemic.

BARBADOES, WEST INDIES.—The report of United States Consul W. H. Polleys for the month of June shows a total of 61 deaths in a population of 20,000; annual rate 36.6 per 1,000; mean temperature 83.°5; no epidemic diseases, and sanitary condition good.

BRADFORD, ENGLAND.—United States Consul C. O. Shepard sends a report for the week ending July 17, showing a total of 65 deaths, of which 34 were under 5 years, 18 under one year, and 11 over 60 years of age. Among the causes of death were: scarlet fever 8, whooping-cough 4, and 2 from violence.

BUDA-PESTH, HUNGARY.—United States Consul Henry Sterne, under date of June 20, calls attention to the fact that small-pox is epidemic in Zemplin and other parts of Hungary, from which many emigrants go to the United States.

GUAYMAS, MEXICO.—The report for the month of June gives only 10 deaths in a population of 5,500, being at the annual rate of 21.8 per 1,000. Of the 10 deaths, 3 were due to accidents and injuries, leaving a proper death rate from disease of less than 15 per 1,000.

PARA, BRAZIL.—United States Consul A. C. Prindle reports for the month of June 161 deaths in a population of 40,000, giving an annual death rate of 48.3 per 1,000.

SINGAPORE.—United States Consul A. G. Studer, under date of June 28, reports this city and the adjacent country free from infectious or contagious diseases in epidemic form.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

CAMDEN, N. J.—Dr. J. H. Wroth, physician in charge of the city dispensary, sends a report of small-pox, under date of August 4. Up to July 31 the city physicians had reported 48 cases of small-pox and 6 of varioloid. Of these cases 14 were fatal, and 28 remained under treatment. The report does not include any other cases than those occurring among the poor, and attended by the city physicians.

CARTHAGE, MISS.—Dr. W. R. Blailock, under date of August 5, describes this town as situated in Leake County, about 1¼ miles north of the present head of navigation of Pearl River, and having about 300 inhabitants. The remaining part of that division of Leake County known as "Beat No. 2" has a population of 3,546. During the year ending May 31, 1880, there were 32 deaths in the total population of 3,846, being at the rate of 8.3 per 1,000. The white population being 2,114 and the deaths 20, the rate was 9.4; colored population 1,552, deaths 11, rate 7.1; there are about 180 Indians, among whom one death is noted, cause unknown. The causes of death among the whites were: dysentery 3, other diseases of the bowels 2, pneumonia 1, consumption 1, bronchitis 2, gastritis 1, congestion of lungs 1, typhoid fever 1, disease of brain 1, disease of heart1, malarial fevers 2, convulsions 2, unkown 1, old age 1. The fatal cases among the colored people were: consumption 1, bronchitis 1, disease of brain 1, diseases of heart 2, malarial fevers 2, cancer 1, unknown 2, old age 1. The deaths under 5 years were, 7 white, or 35 per cent., and 3 colored, or 27 per cent. of the whole mortality, for each race.

HAVANA, CUBA.—During the week ending July 30 there were 51 deaths from yellow fever, most of which were among the citizens. At the above date it is estimated that there were 200 cases of the fever in the city. The list of vessels supposed to be infected was published in the BULLETIN No. 6, page 481.

LANSING, MICH.—Dr. H. B. Baker has collected reports for the week ending July 17, from 65 physicians in different parts of the State. The reports show that malarial fevers were most widely distributed in the State at that time, and diarrhœal diseases were next in frequency.

MINSTER, OHIO.—Under date of July 6, Dr. E. T. Wells gives a report of mortality for the year ending June 1, 1880. The population by the recent census is 1,132. The deaths for the year were 22, being at the rate of 19 per 1,000. The causes of death were: diptheria 9, summer diarrhœa 3, puerperal fever 2, Bright's disease 1, diseases of the brain 2, pneumonia 1, cholera morbus 1, convulsions 1, general debility 1, and old age 1. Diphtheria, which has been very fatal in that region for three years past, has now nearly disappeared. During May and June the usual summer diarrhœal diseases, and especially cholera morbus, have been very prevalent.

MOBILE, ALA.—Dr. T. S. Scales, health officer, forwards the following history of yellow fever on board the bark *R. W. Wood*, as given by the captain to Dr. George H. Fowler, quarantine physician, August 2, 1880:

The bark *R. W. Wood* was built in Elsfleth, Germany, in March, 1860, and her regular trade has been from Boston, Mass., to the Cape of Good Hope.

Capt. E. L. Willar's first voyage in this vessel was from Philadelphia, loaded with lumber and corn, to Trinidad Isle, and from Trinidad to Washington City, D. C., with a cargo of crude asphalt, and from Washington, loaded with coal, to Havana.

The bark left Washington June 7, 1880, and arrived in Havana on June 27. While in Havana she lay near the Matanzas Railroad wharf for 15 days, discharging cargo and taking on ballast. The locality of the railroad wharf was considered healthy, and she did not lie at any time on the Havana side of the harbor. The entire crew were shipped in Washington. The captain and all the crew were on shore while in Havana except the steward, Haffcke, Seaman Jonas Berg, and Seaman E. Thurius. The bark left Havana July 12, and the captain was the first man taken sick, July 18. Charles Norris, seaman, was next taken, July 19. Halvar Matson, seaman, was next taken, July 20. E. Thurius and William Harris, seamen, were next taken, July 21, and the second mate, William W. Patterson, was the last man taken sick, July 22. Charles Norris, seaman, was the first to die on board the vessel, July 21. William Harris, seaman, was the second who died on board, July 24, and Second Mate William W. Patterson died in hospital at this station July 29. The bark *R. W. Wood* arrived here July 25, about 11 a. m. Capt. E. L. Willar and the two sailors are convalescing on board. The first mate, Sheehan, and the steward, Haffcke, have had yellow fever, but not on this voyage, and Jonas Berg, seaman, has never had the fever.

The captain reports that the weather was warmer in Washington and in Trinidad than in Havana, the thermometer showing a mean of 82° in Havana, while in Washington it was over 90°.

The bark is quarantined fully a mile from any other vessel, and no person is allowed any communication whatever with her except myself. Every precaution possible has been taken to prevent the spread of the disease.

MUSCATINE, IOWA.—Under date of August 7, Dr. F. H. Little reports that a slight epidemic of scarlet fever, which had occurred in May, has again appeared, but only one death is reported. The usual summer diarrhœa prevails among children, but the mortality is small. Malarial fevers are not more common than usual, and the sanitary condition of the city is better than it has been for several years past.

NASHVILLE, TENN.—Dr. W. M. Clark, secretary of the State board of health, writes that scarlet fever is not epidemic in Nashville, though it has prevailed to some extent. With regard to coffee imported on the infected ship *Excelsior* to New Orleans, it is stated, on the authority of the general agent of the Louisville and Nashville, and South and North Railroad, that the whole or a portion of the coffee passed through Nashville, consigned to Chicago, and that this transportation occurred the day before the order of quarantine was issued by the State board.

TUXPAN, MEXICO.—Dr. A. M. Boyd reports 26 deaths for the month of May, of which 3 were from small-pox, 13 from malarial fevers, 2 from measles, and 8 from accidents and injuries. At the date of report, June 12, there was no yellow fever, and the general health of the place was better than usual for the season.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 31, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	FEVER. Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ... Portland	36,400	6	18	25.8	4	.....	4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Bangor	20,000	5	11	28.6	2	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H .... Concord	14,000	3	10	37.3	4	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Mass .... Boston	375,000	135	235	32.7	34	2	113	10	1	.....	.....	.....	7	2	1	.....	2	138	3
Cambridge	50,400	18	31	32.3	3	.....	13	.....	.....	.....	.....	.....	3	1	1	.....	.....	16	1
New Bedford	27,000	7	17	32.9	1	.....	9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburyport	13,800	3	8	29.8	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,476	2	5	34.8	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	4	29.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence	39,144	18	24	31.9	2	1	9	.....	1	.....	1	.....	3	.....	.....	.....	.....	.....	.....
Lowell	59,338	14	31	27.1	2	.....	13	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	13	2
Worcester	52,000	21	36	36.1	2	.....	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lynn	38,000	11	27	36.1	2	.....	11	1	2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Brockton	13,608	1	5	19.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	20,000	3	11	28.6	4	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Milford	9,800	1	3	15.9	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Chicopee	11,000	1	4	18.9	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,600	2	5	20.6	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Somerville	25,000	10	17	22.3	2	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....
Springfield	33,000	12	16	24.8	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	6
R. I..... Providence	104,862	23	47	22.9	7	.....	16	3	1	.....	2	.....	3	1	.....	.....	.....	23	.....
Conn .... New Haven	63,000	16	27	22.5	1	.....	11	.....	1	.....	.....	.....	3	.....	.....	.....	.....	12	.....
New Britain	14,000	5	10	37.3	2	.....	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1
Waterbury	20,000	8	14	36.5	3	.....	4	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	1
Vt ..... Burlington	16,500	8	10	31.8	.....	.....	6	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
N. Y ..... New York	1,209,561	286	625	26.9	108	6	174	20	6	8	2	.....	34	2	8	2	6	260	18
Brooklyn	564,448	163	301	27.3	48	.....	48	8	4	5	1	.....	16	.....	1	.....	2	119	3
Yonkers	19,000	5	10	27.4	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Poughkeepsie	21,200	4	8	19.3	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Newburg	18,043	7	10	29.0	1	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Sing Sing	7,500	1	4	27.6	.....	.....	1	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Utica	34,000	.....	2	3.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Rochester	90,000	24	54	31.0	6	.....	13	1	2	.....	.....	.....	1	.....	.....	.....	.....	6	2
Buffalo	155,159	23	49	16.4	7	.....	15	1	1	.....	.....	.....	1	.....	.....	.....	.....	19	1
Seneca Falls	6,000	2	7	60.9	.....	.....	1	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Lansingburg	7,150	2	2	16.0	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Jervis	10,000	1	2	10.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	34	77	19.2	7	.....	21	1	1	4	3	.....	5	.....	2	.....	.....	31	1
Newark	130,000	.....	51	20.5	7	.....	14	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Orange	13,000	1	2	8.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plainfield	8,000	2	3	18.6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	908,380	166	378	21.7	44	1	56	4	9	.....	.....	.....	4	.....	.....	2	4	.....	.....
Pittsburgh	153,880	38	63	22.3	7	.....	17	3	2	.....	4	.....	4	1	.....	.....	1	11	4
Erie	28,565	2	5	9.0	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1
Del ..... Wilmington	44,000	5	14	16.6	.....	.....	1	.....	.....	1	1	.....	1	.....	.....	.....	.....	.....	2
Md ..... Baltimore	393,796	79	162	21.5	21	.....	23	6	2	1	9	.....	2	1	.....	.....	8	52	4
District of Columbia	170,000	34	69	21.1	9	1	10	1	3	1	1	.....	7	.....	2	.....	2	21	3
Va ..... Norfolk	26,200	8	15	29.4	.....	.....	1	3	1	2	.....	.....	1	.....	1	.....	.....	8	1
Richmond	64,650	23	43	34.7	4	.....	8	.....	2	.....	.....	.....	2	1	1	.....	.....	13	.....
Lynchburg	21,000	1	3	7.4	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	5	6	17.5	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	12	35	31.9	7	.....	3	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	11	18	35.4	1	.....	8	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Atlanta	38,000	11	16	22.0	2	.....	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Savannah	33,248	9	14	22.0	2	.....	3	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Rome	5,000	.....	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	3	4	20.9	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	5	21	27.4	2	.....	1	.....	.....	1	.....	.....	.....	.....	2	.....	.....	2	.....
Selma	6,505	3	5	40.1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss .... Columbus	6,740	.....	1	7.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	2	2	14.9	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	210,000	22	76	18.9	16	.....	6	1	2	3	2	.....	5	1	1	.....	.....	.....	.....
Shreveport	8,033	1	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	20,597	6	9	21.9	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	3	.....
Austin	16,000	1	1	3.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	12	27	32.4	4	.....	3	.....	3	.....	.....	.....	3	.....	.....	.....	5	13	.....
Chattanooga	13,000	2	5	20.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clarksville	7,250	1	3	22.2	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	21	49	14.6	13	.....	3	.....	1	2	.....	.....	.....	.....	.....	.....	.....	7	2
Ohio ..... Cincinnati	280,000	51	88	16.4	11	1	14	1	.....	.....	.....	.....	4	4	1	.....	1	27	6
Cleveland	175,000	.....	85	25.3	3	2	28	2	.....	.....	1	.....	4	.....	.....	.....	1	.....	1
Gallipolis	5,500	.....	1	8.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	8	18	24.2	2	.....	2	1	.....	.....	.....	.....	3	.....	.....	.....	.....	3	1
Ind ..... Indianapolis	75,300	12	20	13.5	1	.....	5	.....	1	2	2	.....	.....	.....	.....	.....	.....	8	2
Jeffersonville	9,542	3	7	38.3	1	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Evansville	30,000	8	12	20.9	1	.....	2	.....	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Richmond	13,000	.....	1	4.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,208	149	227	23.5	9	3	71	13	2	2	9	.....	10	.....	3	.....	2	106	8
Aurora	12,059	2	5	21.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peoria	34,850	6	14	20.7	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	1	.....
Jacksonville	15,000	1	6	21.0	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1
Moline	8,000	5	8	52.1	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	2	3	17.9	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	127,000	65	83	34.0	3	.....	23	2	1	.....	.....	.....	.....	.....	1	.....	.....	28	1
Minn .... Saint Paul	41,800	15	26	32.0	2	1	8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2
Mich ... East Saginaw	19,000	1	2	5.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa .... Dubuque	30,000	.....	9	15.7	2	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	15,800	1	3	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Mo ..... Saint Louis	500,000	64	135	14.1	13	.....	27	1	2	7	2	.....	.....	.....	1	.....	3	45	4
Nebr .... Omaha	30,000	13	23	40.0	.....	.....	8	2	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1
Utah .... Salt Lake City	25,000	5	6	12.5	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JULY 31, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Cal .....Sacramento	21,500	1	7	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Los Angeles	11,000	4	5	23.7	.....	1	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Vallejo	7,000	1	1	7.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,172,611	1,788	3,674	23.4	460	21	916	92	66	48	44	.....	160	17	32	4	43	1,021	92

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 233 white, 2 colored. Rate per 1,000, white 32.8, colored 20.9. Providence has 100,862 white, 4,000 colored; deaths, 44 white, 3 colored. Rate per 1,000, white 22.7, colored 39.1. Sing Sing has 7,250 white, 250 colored; deaths, 3 white, 1 colored. Rate per 1,000, white 21.6, colored 208.7. Wilmington, Del., has 38,000 white, 6,000 colored; deaths, 10 white, 4 colored. Rate per 1,000, white 11.0, colored 34.8. Baltimore has 338,384 white, 55,412 colored; deaths, 124 white, 38 colored. Rate per 1,000, white 19.1, colored 35.8. District of Columbia has 114,000 white, 56,000 colored; deaths, 34 white, 35 colored. Rate per 1,000, white 15.5, colored 32.5. Norfolk has 14,900 white, 11,300 colored; deaths, 4 white, 11 colored. Rate per 1,000, white 14.0, colored 50.7. Lynchburg has 10,000 white, 11,000 colored; deaths, 1 white, 2 colored. Rate per 1,000, white 5.2, colored 9.5. Richmond has 37,971 white, 26,699 colored; deaths, 21 white, 22 colored. Rate per 1,000, white 28.9, colored 43.1. Wilmington, N. C., has 6,714 white, 10,286 colored; deaths, 1 white, 5 colored. Rate per 1,000, white 7.7, colored 25.4. Charleston has 25,000 white, 32,000 colored; deaths, 13 white, 22 colored. Rate per 1,000, white 27.0, colored 35.7. Savannah has 18,229 white, 15,019 colored; deaths, 8 white, 6 colored. Rate per 1,000, white 22.8, colored 20.7. Augusta has 16,182 white, 10,830 colored; deaths, 8 white, 10 colored. Rate per 1,000, white, 25.8, colored 46.9. Atlanta has 22,000 white, 16,000 colored; deaths, 7 white, 9 colored. Rate per 1,000, white 16.5, colored 29.5. Selma has 2,425 white, 4,080 colored; deaths, 1 white, 4 colored. Rate per 1,000, white 21.5, colored 51.1. Mobile has 28,000 white, 12,000 colored; deaths, 11 white, 10 colored. Rate per 1,000, white 20.4, colored 43.5. Jacksonville, Fla., has 6,000 white, 4,000 colored; deaths, 1 white, 4 colored. Rate per 1,000, white 8.7, colored 39.1. Columbus, Miss., has 3,500 white, 3,240 colored; deaths, white 1, colored none. Rate per 1,000, white 14.1. New Orleans has 155,000 white, 55,000 colored; deaths, 47 white, 29 colored. Rate per 1,000, white 15.8, colored 27.5. Shreveport has 3,916 white, 4,117 colored; deaths, white none, colored 1. Rate per 1,000, colored 12.7. Austin has 12,000 white, 4,000 colored; deaths, white none, colored 1. Rate per 1,000, colored 13.0. Clarksville has 4,000 white, 3,250 colored; deaths, 2 white, 1 colored. Rate per 1,000, white 26.1, colored 16.1. Nashville has 27,874 white, 15,669 colored; deaths, 11 white, 16 colored. Rate per 1,000, white 20.6, colored 53.2. Chattanooga has 8,000 white, 5,000 colored; deaths, 3 white, 2 colored. Rate per 1,000, white 19.6, colored 20.9. Louisville has 153,125 white, 21,875 colored; deaths, 30 white, 19 colored. Rate per 1,000, white 10.2, colored 46.6. Keokuk has 15,000 white, 800 colored; deaths, 3 white, 1 colored. Rate per 1,000, white 10.3, colored 65.2. Total white population, 1,538,314; deaths, 621; annual rate per 1,000, 21.0. Total colored population, 394,825; deaths, 257; annual rate per 1,000, 33.9.

The following reports for the week ending July 31 are from places requiring burial permits, and having less than 5,000 population:

Bridgewater, Mass., 4,000; deaths, 2; under five years, 1; diarrhœa 1. Brunswick, Ga., 2,900; no deaths. Edgartown, Mass., 1,400; deaths, 2; under 5 years, 1. Fairfield, Conn., 3,748; no deaths. Morgan City, La., 2,018; no deaths Murfreesborough, Tenn., 3,800; deaths, 1; under 5 years, 1. Nantucket, Mass., 3,679; deaths, 6; under 5 years, 1; diarrhœa 1. Total population, 21,545; deaths under 5 years, 4; total deaths, 11; annual rate per 1,000, 26.6.

The following reports for the week ending July 31 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 3; consumption 1, accident 1. Allegheny, Pa., 78,000; deaths, 16; under 5 years, 13; consumption 1, diarrhœa 6, lung diseases 2, accidents 2. Bath, Me., 7,881; deaths, 4; diarrhœa 2, accident 1. Battle Creek, Mich., 7,500; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Belfast, Me., 5,308; deaths, 2; consumption 2. Boulder, Colo., 3,030; deaths, 2; under 5 years, 2; diarrhœa 2. Brattleborough, Vt., 6,000; deaths, 2; under 5 years, 2; diarrhœa 2. Carrollton, Miss., 700; no deaths. Chillicothe, Ohio, 11,000; deaths, 4. Circleville, Ohio, 6,400; deaths, 3; under 5 years, 2; diarrhœa 1, diphtheria 1, accident 1. Columbus, Ga., 10,133; deaths, 6; under 5 years, 2; accident 1. Corinth, Miss., 2,264; deaths, 1. Cumberland, Md., 12,000; deaths, 6; under 5 years, 1; diarrhœa 1, enteric fever 1, scarlet fever 1, lung disease 1. Dallas, Tex., 10,000; deaths, 6; under 5 years, 4; consumption 1, diarrhœa 1, malarial fever 1. Davenport, Iowa, 23,000; deaths, 14; under 5 years, 8; consumption 1, diarrhœa 5, malarial fever 3, scarlet fever 3. Decatur, Miss., 1,000; deaths, 1; under 5 years, 1; malarial fever 1. Fayette, Miss., 400; no deaths. Fernandina, Fla., 3,000; deaths, 1. Flint, Mich., 9,000; deaths, 2; under 5 years, 1; consumption 1. Gunn City, Mo., 125; deaths, 1; under 5 years, 1. Hernando, Miss., 1,000; no deaths. Huntingdon, Pa., 4,500; deaths, 2; diarrhœa 1. Huntingdon, Tenn, 850; no deaths. Helena, Mont., 3,630; deaths, 1; malarial fever 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; deaths, 1. Jefferson, Tex., 3,250; deaths, 4; under 5 years, 2; consumption 1, puerperal 2. Kenosha, Wis., 5,000; deaths, 2. La Salle, Ills., 10,000; no deaths. Lebanon, Pa., 9,000; no deaths. Madison, Ind., 9,009; deaths, 6; under 5 years, 4; diarrhœa 1, diphtheria 1, scarlet fever 2. Martinsburg, W. Va., 6,384; deaths, 3; under 5 years, 1; diarrhœa 1. Massillon, Ohio, 6,876; deaths, 4; under 5 years, 1; consumption 1. Meridian, Miss., 4,013; no deaths. Milledgeville, Ga., 3,000; deaths, 1. Mount Pleasant, Iowa, 4,500; deaths, 1; under 5 years, 1. Muscatine, Iowa, 8,412; deaths, 2; under 5 years, 1; diarrhœa 1. Muskegon, Mich., 11,300; deaths, 7; under 5 years, 5; diarrhœa 3, malarial fever 2. Nebraska City, Nebr., 5,000; deaths, 2; under 5 years, 2. Niles, Mich., 4,200; deaths, 1. Ocala, Fla., 1,000; no deaths. Okolona, Miss., 2,000; no deaths. *Oshkosh*, Wis., 17,030; deaths, 4; under 5 years, 3; diarrhœa 1, diphtheria 1, lung disease 1. Painesville, Ohio, 5,000; deaths, 1; under 5 years, 1. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 2; under 5 years, 2; diarrhœa 2. Pleasant Hill, Miss., 250; no deaths. Port Gibson, Miss., 1,200; no deaths. Portsmouth, Ohio, 2,320; deaths, 4; under 5 years, 1. Rock Island, Ill., 12,000; deaths, 8; under 5 years, 6; enteric fever 1, lung disease 1, whooping cough 1. Rockland, Me., 7,500; deaths, 2; consumption 1. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 21,000; deaths, 9; under 5 years, 3; consumption 3, diarrhœa 2, enteric fever 1, lung disease 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 1; under 5 years, 1. Summit, Miss., 1,800; no deaths. Tampa, Fla., 1,200; no deaths. Titusville, Pa., 9,000; no deaths. Verona, Miss., 1,000; deaths, 1; under 5 years, 1; diarrhœa 1. Waxahatchie, Tex., 2,000; no deaths. Waynesboro', Miss., 500; deaths, 1; puerperal 1. Westville, Miss., 172; no deaths. Winchester, Va., 5,000; deaths, 2; under 5 years, 2; diarrhœa 2. Winona, Minn., 10,000; no deaths. Youngstown, Ohio, 15,329; deaths, 2; under 5 years, 1. Total population, 458,401; deaths under 5 years, 76; total deaths, 147; annual rate per 1,000, 16.7.

INSPECTION OF VESSELS AND TRAINS AT PENSACOLA.

Extract from the proceedings of the board of health of the city of Pensacola at a meeting July 27, 1880. Mayor O'Neal offered the following resolution, which was unanimously adopted:

Whereas this board of health is charged with the duty of protecting the public health of this community against the introduction of contagious or infectious diseases: Be it, therefore,

Resolved, That on and after the publication of the mayor's proclamation, no vessels or freighted cars coming from an infected city or place will be allowed to land at the wharves or enter the city without a certificate from an officer of the board of health certifying that he has personally examined the freight of such vessel or car, the officers, passengers, and crew thereof, and has satisfied himself of the freedom from infection of said vessel or car, officers, and passengers thereof, and that the freight or cargo comprises none of the following articles, which are excluded from entrance into this city or port, namely: Woolen textile fabrics, cotton, hemp, coffee, second-hand clothing, upholstered furniture, tropical fruits and productions; and, for the purpose of carrying this order into effect, an officer or officers shall be appointed and stationed at Pensacola Junction or on the trains for examination of such certificates or passes.

Attest:

S. T. PONS, *Clerk.*

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	94			1	7																	2	1		3					2			2								15	10	2	97
Albany Hospital	Albany, N. Y	do	125	48				2																	1								1	1		1								10	10		48
Emigrant Hospital	New York, N. Y	do	462	51	12	1	3	10	2	1		1		5		5			1	4	6	4		3	3			6					5	3	1	1		2		12					28	17	5	57
German Hospital	do	do	90	75	3									1							1	1			1																			18	16	3	74
Hart's Island Hospital	Hart's Island, N. Y	do	300	243			1																																					19	13	1	248
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	6																																								1	1		6
Rochester City Hospital	Rochester, N. Y	do	125	63			1																	1																				2	6		59
Saint Mary's Hospital	do	do	320	233																				5	3						1		1					1						8	6	2	233
Saint Barnabas Hospital	Newark, N. J	do	45	27			3							1																														1		26
Saint Michael's Hospital	do	do	140	138	3		1	10						1		2						1		2	1		13							2										26	18	4	142
Germantown Hospital	Germantown, Pa	do	25	19																		1																						1	2		18
Jewish Hospital	Philadelphia, Pa	do	40	25		1																																						4	4		25
Saint Mary's Hospital	do	do	80	21				5						1	1	6						2		5		1		2						1						1				3	3		21
Homeopathic Hospital	Pittsburgh, Pa	do	40	15			1															1																						6	6	1	14
Saint Franciscus Hospital	Pittsburgh, Pa	do	125	51	1									1																														4	2		53
Freedmen's Hospital	Washington, D. C	do	300	232	1								1												1								1				1							12	7	2	235
Providence Hospital	do	do	160	126	1	2	1	25					1		1									3	4		9																	20	20	1	128
Georgian Infirmary	Savannah, Ga	do	50	37				1																1	1		2																	1	1		37
Freedmen's Hospital	Augusta, Ga	do	50	18				1																	1		1								1										1		17
Saint Mary's Hospital	Galveston, Tex	do	300	92	1			10					1	2		1								8	7		9					2	2		2								16	21		87
Cincinnati Hospital	Cincinnati, Ohio	do	500	283	5	3		5					3	2		7					2	1		8	3		11					1		1	1	1	1	4						36	74	5	296
Saint Luke's Hospital	Detroit, Mich	do	25	11																																								2	1		12
City Hospital	Saint Louis, Mo	do	411	243	5	1	1	15					9	2	2	28								2	8		18								2								70	51	6	247
Saint John's Hospital	do	do	75	19									1			3									1		2					1												3			21
Saint Louis Hospital	do	do	250	76				6				8													10	8	19																	17	10		79
German Hospital	San Francisco, Cal	do	150	68	1	1		3					1			2								2	2	1	3						1											10	10	2	66
Naval Hospital	Chelsea, Mass	do	100	16																				1											4												14
Do	Brooklyn, N. Y	do	115	36		1		3					1			2									1										2										1	2		34
Do	Washington, D. C	do	50	13				1																																							13
Do	Mare Island, Cal	do	77	26		1		3																																					1		3
Do	Pensacola, Fla	do	20	1																																											1
Riverside Hospital	New York, N. Y	Contagious diseases	150	6																								1		1											2	1	2	2	2	4
Municipal Hospital	Philadelphia, Pa	do		6																																							8		1	7
State Hospital for Women and Children	do	Women and children	18	13																																							3	2		14
Women's Hospital of Illinois	Chicago, Ill	do	19	7																																										7
Women's Hosp. and Foundlings' Home	Detroit, Mich	do	30	26																																									3		23
Insane Hospital	Augusta, Me	Insane	400	420																																							4	4		420
New Hampshire Asylum	Concord, N. H	do	300	291																																							2	4		289
Lunatic Hospital	Boston, Mass	do	200	160																																											160
State Lunatic Hospital	Worcester, Mass	do	650	520																																							1	2		519
Retreat for Insane	Hartford, Conn	do	150	139																																							3	2		140
Hospital for Insane	Middletown, Conn	do	515	519																																							4	4	2	517
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1256	1271																																							13	4	3	1277
Hudson River State Hospital	Poughkeepsie, N. Y	do	243	244											2																													7	5	2	244
Marshall Infirmary	Troy, N. Y	do	142	137				1								1					1																							3	7		133
Willard Asylum	Willard, N. Y	do	1594	1603																																									3	2	1	1603
State Hospital for Insane	Danville, Pa	do	700	468																																									3			471
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	579	580																																									5	1	1	583
Eastern Lunatic Asylum	Williamsburg, Va	do	330	318																																									1	1	3	315
North Carolina Insane Asylum	Raleigh, N. C	do	283	286																																												286
Alabama Insane Asylum	Tuscaloosa, Ala	do	406	407																																									2	2		407
State Lunatic Asylum	Austin, Tex	do	359	355											1																														5	1		359
Michigan Asylum	Kalamazoo, Mich	do	660	658																																									3	3	1	657
Minnesota Hospital for Insane	Saint Peter, Minn	do	668	669																																									7	4		672
Insane Asylum	Saint Louis, Mo	do	329	332																																									6			338
Insane Asylum of California	Stockton, Cal	do	1117	1115																																									2	2	3	1112

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	July 24	2	20.9													64
Prince Edward Isl'd	Charlottetown	12,000	July 31	2	8.7													68.5
Canada	Montreal	135,000	July 31	70	27.1						1		1				1	65.9
Bermuda	Hamilton	14,867	July 27	5	17.5													82.7
Do	Hamilton	14,867	Aug. 3	6	21.1													85.7
Cuba	Havana	195,437	July 24	243	64.9				59		7		3					84
Hayti	Cape Haytien	7,500	May 29	7	48.7													
Do	do	7,500	June 5	7	48.7													
Do	do	7,500	June 12	9	62.6													
Do	do	7,500	June 19	6	41.4													
Do	do	7,500	June 26	8	55.2													
Do	do	7,500	July 3	11	76.5													
Do	do	7,500	July 10	6	41.4													
Do	do	7,500	July 17	11	76.5													
Guadeloupe	Point-a-Pitre	22,919	July 10	15	34.1				3									
Trinidad	Spain	30,000	May 29	33	57.4								1					
Do	do	30,000	June 5	15	26.0													
Do	do	30,000	June 12	20	34.5								1					
Do	do	30,000	June 19	24	41.7													
Do	do	30,000	June 26	22	38.3													
Do	do	30,000	July 3	14	24.3													
St. Christopher	Basseterre	8,000	June 7	6	39.1													84
Do	do	8,000	June 14	4	26.1													88
Do	do	8,000	June 21	5	32.6													87
Do	do	8,000	June 28	7	45.6													85
Aspinwall	Colon	3,000	July 17	6	104.3													85
Do	do	3,000	July 24	6	104.3													85
Mexico	Matamoros	16,000	July 24	8	26.0													
Do	do	16,000	July 31	13	42.2													
Do	Acapulco	3,500	July 10	6	89.4													85
Do	do	3,500	July 17	3	44.7													85
Brazil	Rio de Janeiro	330,000	July 3	183	28.9				7								3	
Do	do	330,000	July 10	180	28.4				5				3				4	
St. Helena	Jamestown	6,241	June 26	6	50.2													73.9
Do	do	6,241	July 3															71.9
Do	do	6,241	July 10	1	8.4													73.7
Ireland	Queenstown	10,000	July 24	7	36.5													
Scotland	Glasgow	589,598	July 17	217	19.2						1		5				37	58.6
Do	Dundee	155,000	July 17	56	18.6							1				12	1	59.1
Do	Leith	58,479	July 24	21	16.4												5	57.1
England	London	3,664,169	July 17	1,441	20.5						3		11				132	
Do	Newcastle	148,000	July 17	56	19.5												6	58.3
Do	Tunstall	180,093	July 17	77	22.4												8	
Do	Sheffield	304,938	July 17	109	19.0													57.8
Do	do	304,938	July 24	79	19.1								1				7	58.7
Do	Bristol and Clifton	213,500	July 10	81	19.6												3	61.8
Do	do	213,500	July 17	114	19.5													58.3
Do	Hanley	21,349	July 17	11	26.7													
Wales	Cardiff	82,364	July 24	16	10.1												2	64.1
France	Paris	1,988,806	July 15	908	23.9						37		22				92	
Do	Havre	92,086	July 17	73	41.2													62
Do	Rouen	104,902	July 24	74	36.8													
Switzerland	Zurich	22,103	July 3	1	2.3													
Holland	Amsterdam	316,952	July 17	154	25.3								3		3		2	69
Do	Rotterdam	150,378	July 17	69	21.2							1	1			8		
Do	do	150,378	July 24	61	23.9							1				9		
Germany	Mannheim	50,500	July 17	21	21.7													74
Do	do	50,500	July 24	27	27.9													70
Do	Breslau	276,000	July 10	201	37.9								3				60	66
Do	Brunswick	74,000	July 17	30	28.1												1	
Do	Hamburg	400,000	July 15	183	23.9												9	
Do	Berlin	1,096,644	July 10	981	46.5							31	12	5		136	74	
Do	Bremen	109,000	July 3	40	19.1									1	1		1	
Do	do	109,000	July 10	48	23.0									1	1		2	
Do	Barmen	95,000	July 17	42	23.5								1				2	64
Do	do	95,000	July 24	60	32.8								1				3	61
Bavaria	Nuremberg	100,000	June 26	49	24.9								1				5	51
Do	do	100,000	July 3	39	19.7													65
Do	do	100,000	July 10	47	23.9												3	62
Saxony	Chemnitz	91,806	July 10	45	25.6								1				1	69
Do	Dresden	220,500	July 3	112	26.4							1	1			17	17	65
Do	do	220,500	July 10	119	28.1											15	15	64
Belgium	Antwerp	173,643	July 24	102	30.6					29	22	15	2				1	
Do	Brussels	365,674	July 17	142	18.1												5	
Denmark	Copenhagen	235,254	July 7	106	23.5							9	1			15		63
Italy	Genoa	180,000	July 24	102	29.6							11	2					73
Austria	Trieste	128,233	July 10	66	26.8					1	1							
Do	Vienna	746,243	July 17	385	22.7						2		6				13	72
Hungary	Buda-Pesth	333,551	July 10	227	36.0						3		5				1	
Russia	St. Petersburg	669,741	July 2	637	49.6								122					
Russian Poland	Warsaw	357,169	July 10	200	31.0													80
Sweden	Stockholm	169,429	July 10	90	28.7												16	66
Norway	Christiania	116,801	July 10	46	20.5												2	64
Spain	Malaga	115,882	July 17	98	44.1					16	3	2				12		
Do	Cadiz	65,028	July 17	58	46.5					5	1	16	4	4				70
Do	Carthagena	76,000	July 18	47	31.7													86
Barbary	Tripoli	20,000	July 17	6	15.6													67.4
Morocco	Tangier	15,000	July 10	34	118.3					10	1			2				78.1
Do	do	15,000	July 17	32	111.3					7	1			1				81.9
Egypt	Alexandria	220,000	July 10	201	47.7													
India	Calcutta	429,535	June 19	152	18.4	1					3		8				1	84.8
Do	Bombay	644,405	June 8	404	30.6	1					3						19	83.6
Do	do	644,405	June 15	369	29.9													86.2
Do	do	644,405	June 22	364	27.8						4						18	86.1

National Board of Health

BULLETIN.

FOSTER, M.D. N.J.S. 28th

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THE DEATH-RATE OF SING SING, N. Y.

The mortality of this village of 7,500 inhabitants, as reported by Mr. George Lockwood, clerk of the corporation, and published in the BULLETIN of the National Board of Health, has attracted the attention of New York life-insurance companies. The death-rate from May 8 to July 3 ranging from 41 to 48 per 1,000 per annum, while that of New York City was only from 26 to 33 for the same period, a letter of inquiry was addressed by the secretary of the Manhattan Life Insurance Company to Dr. G. J. Fisher, of Sing Sing. He replied that the figures given in the BULLETIN were "shamefully erroneous." Mr. Lockwood very candidly admits that his reports, obtained from the undertakers, have included burials of persons dying in New York City, some from adjoining towns, many from places without the corporation limits, and also the deaths in the State prison. The latter place includes some 1,700 convicts, and the deaths probably amount to one-third of the total number reported. This statement of course removes the charge of inaccuracy on the part of the National Board of Health, and Dr. Fisher, in acknowledging this, forwards the following as the correct report of deaths and rate of mortality for the dates given: Week ending June 5, 2 deaths; rate 13.9. June 12, no deaths; June 26, July 3, 10, and 24, three deaths in each week; rate 20.8 per 1,000 per annum.

CATTLE PLAGUE IN ERIE, PA.

The papers of August 11 and 12 note the occurrence of a disease which has caused the death of nine cows in the eastern part of the city, and many more are sick. The nature of the disease is not specified, but the health officer, Dr. Germer, ascribes it to improper food and impure water used by the animals in that locality. The term "cattle plague" is used in the papers, but the brief statement given indicates a non-contagious disease of local origin and removable cause.

ABSTRACTS FROM CONSULAR REPORTS.

BRADFORD, ENGLAND.—United States Consul C. O. Shepard reports for the week ending July 28 a death-rate of 17.5 per 1,000 per annum, and a birth-rate of 35; the deaths being 66 and the births 132 for the week. Among the causes of death were: scarlet fever 4, whooping-cough 3, typhoid fever 1, and diarrhœa 9; under 5 years of age 34, and 20 under 1 year; five deaths were at 60 years and over.

CONSTANTINOPLE.—Under date of July 29, United States Consul G. H. Heap reports great improvement in the famine-stricken villages, and no contagious diseases prevailing in his consular district. In some places an epizoötic disease is still causing a number of deaths among horses.

HONOLULU, SANDWICH ISLANDS.—United States Consul F. P. Hastings sends reports of mortality for the months of May and June. In May there were 46 deaths, of which 9 were under 1 year, 2 from 1 to 5, 7 from 5 to 20, 5 from 20 to 30, 6 from 30 to 40, 8 from 40 to 50, 5 from 50 to 60, and 4 over 70 years of age. Of those who died, 39 were natives, 5 Chinese, 1 English, and 1 German. Among the causes of death were: accidents 2, consumption 7, convulsions 2, debility 1, dysentery 3, dropsy 10, typhoid fever 3, old age 4, unknown 7.

In July there were 41 deaths, of which dysentery caused 2, paralysis 2, consumption 7, heart-disease 4, debility 2, typhoid fever, 1, old age 1, and unknown 13. Of the 41 decedents 5 were under 1 year, 2 from 5 to 10, 2 from 10 to 20, 4 from 30 to 40, 6 from 40 to 50, 6 from 50 to 60, 4 from 60 to 70, and 3 over 70 years of age.

LEEDS, ENGLAND.—For the week ending July 24 there were 213 births and 126 deaths in the borough of Leeds. The death-rate was 20.6 and the birth-rate 34.8 per 1,000 per annum. Of the decedents 38 were under one year, and 20 over 60 years of age. Mean temperature, 58°.6. Among the causes of death were: diarrhœa 17, scarlet fever 5, typhoid fever 2, whooping-cough 1.

MOSCOW, RUSSIA.—United States Consul August Weber, under date of July 26, sends a correction of the deaths reported for February and March. The medical inspector of the city omitted to include deaths from certain non-contagious diseases in his report to the consuls, and the numbers should have been 2,107 for February and 2,552 for March. The published mortality for April was 2,607, of which 1,203 were under 5 years of age. Among the causes of deaths were: Typhus fever 99, malarial fevers 98, small-pox 9, scarlet fever 21, measles 40, dysentery 7, diphtheria 21, whooping-cough 31, puerperal fever 15, syphilis 51, consumption 370, gastro-intestinal diseases 345, diseases of respiratory system 416, accidents 16, violent deaths 3, suicides 10, still-births 87.

PORT AU PRINCE, HAYTI.—United States Consul J. M. Langston, under date of July 27, states that although this is the usual rainy season in Hayti, and rain has fallen on most parts of the island, a remarkable drought has prevailed for some time about Port au Prince. The water supply of the town for domestic purposes is derived from seven springs, mostly high up on the mountains. Of these two are now dry, and the rest give such a reduced supply that serious inconvenience is anticipated unless rain falls soon. But while the heat and the clouds of dust are very oppressive and cause much discomfort, the health of the town is better than usual, and no sickness prevails among the shipping. During the summer there has been as yet no case of yellow fever, and but one of typhoid fever, which proved fatal July 20. The leading physician of the place states that this is the third case he has known to appear here in five years. The season for yellow fever is now past, and there are no apprehensions of its occurrence here this year.

VIENNA, AUSTRIA.—For the year 1879, a total of 20,778 death is reported, giving an annual rate of 28.8 per 1,000. The report states that for the same year the death-rate was 35.1 for Trieste, 31.6 for Buda Pesth, 27.7 for Berlin, 26.9 for Paris, and 21.4 for Frankfort, which was the lowest of European cities. Of violent deaths there were 396, and the suicides are stated at 2.8 per 1,000 of the population. The lowest number of deaths monthly was 1,400, in September; the highest, 2,116, in March.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BAY CITY, MICH.—Thomas Carney, health officer, writes under date of August 10, stating that the county clerk's report for the year 1879 gives 184 deaths from all causes. The population being estimated at 20,638, the death-rate for 1879 was only 8.9. Of the 184 deaths, 70 were under 9 years of age.

BURLINGTON, VT.—Dr. George M. Ockford writes under date of August 10 that during the month of July cholera morbus, cholera infantum, gastro-enteritis, &c., prevailed, and some cases of whooping-cough were observed. Continued fevers have been common in some parts of the country during the summer, but the city of Burlington shows a good condition of health at the date of writing.

HAVANA, CUBA.—For the week ending August 6 there were 43 deaths from yellow fever; during the month of July, 1,017 deaths were reported from all causes, of which 282, or 27.7 per cent., were from yellow fever. The Spanish brigs *Chanito*, for Baltimore, August 2, and *Nicolas*, for New York, August 8, are believed to have had cases of yellow fever on board while at Havana. The bark *R. W. Wood*, on board of which yellow fever appeared on her voyage to Mobile, lay at a healthy wharf, but as the crew were allowed to have free communication with the city, it is probable that they contracted the disease on shore.

NASHVILLE, TENN.—Dr. W. M. Clark, secretary of the State board of health, writes under date of July 29 that a mild form of scarlet fever is epidemic in Nashville. In the eastern part of the State dysentery is prevalent, and typhoid fever is common in the hilly portion of the country. The western portion of the State enjoys a remarkable exemption from disease for the season of the year.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 7, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Portland	34,600	9	17	25.6	2	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	2	3	11.2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	144	255	35.5	25	1	125	6	3	.....	.....	.....	14	3	.....	.....	2	140	5
Cambridge	50,400	10	20	20.8	1	.....	4	1	.....	.....	.....	.....	1	.....	.....	.....	.....	5	.....
New Bedford	27,000	9	17	32.9	1	.....	8	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Newburyport	13,800	.....	4	13.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Marblehead	7,476	.....	3	20.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	17	35	37.3	3	3	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	1	4	29.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence	39,144	11	19	25.3	2	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Lowell	59,338	23	31	27.1	2	.....	12	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Pittsfield	12,300	.....	10	42.4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,000	13	27	24.3	1	.....	14	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lynn	38,000	10	17	23.3	5	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,608	1	4	15.3	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	11	13	43.9	2	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Milford	9,800	2	4	21.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	3	3	14.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,600	3	4	16.4	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Somerville	25,000	10	11	22.9	1	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
Springfield	33,000	8	13	20.2	3	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
R. I. ..... Providence	104,862	24	45	22.3	3	.....	9	4	.....	.....	5	.....	2	.....	.....	.....	1	19	1
Conn .... New Haven	63,000	11	27	22.5	2	.....	3	.....	1	1	.....	.....	1	.....	.....	.....	.....	5	2
New Britain	14,000	3	3	11.2	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,700	7	9	23.8	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....	.....
Vt ..... Burlington	16,500	1	1	3.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
N. Y ..... New York	1,209,601	337	654	28.2	81	6	188	20	7	18	7	.....	41	3	10	.....	4	272	26
Brooklyn	564,448	143	271	25.5	28	4	78	3	1	8	3	.....	14	.....	2	.....	.....	107	10
Yonkers	19,000	5	13	35.7	3	.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	3	.....
Poughkeepsie	20,200	3	7	18.9	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Newburg	18,043	4	10	29.0	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sing Sing	7,500	.....	4	27.8	.....	.....	1	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Utica	34,000	4	6	9.1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Rochester	90,000	11	33	18.9	5	.....	4	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	4	2
Buffalo	155,159	32	45	15.1	3	1	13	1	1	.....	1	.....	6	.....	.....	.....	.....	17	.....
Seneca Falls	6,000	2	3	26.1	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Lansingburg	7,150	.....	3	21.9	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Port Jervis	10,000	.....	2	10.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dunkirk	8,000	.....	1	6.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	46	111	27.	15	1	23	1	3	4	4	.....	4	1	10	.....	.....	39	7
Orange	13,000	2	5	20.	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Camden	35,000	14	20	30.	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....
Pa ..... Philadelphia	908,380	138	302	17	35	.....	45	2	13	.....	.....	.....	9	.....	1	2	4	.....	.....
Pittsburgh	153,880	38	65	22.	7	.....	22	4	2	.....	3	.....	3	3	.....	.....	2	14	3
Erie	28,565	6	13	23.7	1	1	3	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....
Del ..... Wilmington	44,000	5	20	23.7	4	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	393,796	90	158	20.9	16	1	39	5	5	1	8	.....	3	1	.....	.....	6	65	3
District of Columbia	170,000	40	86	26.3	20	2	6	2	3	3	.....	.....	4	.....	1	.....	.....	22	3
Va ..... Norfolk	26,200	10	17	33.4	1	.....	3	2	.....	1	.....	.....	.....	.....	.....	.....	.....	7	1
Richmond	64,650	23	40	32.3	3	.....	9	1	2	.....	.....	.....	2	.....	1	.....	3	15	.....
Lynchburg	21,000	1	12	29.6	2	.....	2	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....
N. C ..... Wilmington	17,600	.....	2	5.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	11	26	23.7	5	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....
Ga ..... Augusta	27,012	4	10	19.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Atlanta	38,000	7	12	16.	1	.....	1	.....	2	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Savannah	33,248	4	10	15.7	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	2	4	20.8	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	8	12	52.	3	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	3	11	14.3	4	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....
Selma	7,505	4	7	48.7	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....
Miss .... Columbus	6,740	2	2	15.5	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	2	3	22.4	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	210,000	36	89	21.1	11	.....	5	2	3	5	.....	.....	2	1	.....	.....	.....	.....	3
Shreveport	8,033	2	5	.....	2	.....	.....	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	20,597	4	7	17.0	.....	.....	1	.....	.....	2	.....	.....	1	.....	.....	.....	.....	2	.....
Austin	16,000	1	4	13.1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Tenn .... Nashville	43,543	8	24	28.8	3	.....	4	.....	3	.....	.....	.....	1	.....	1	.....	1	6	.....
Clarksville	7,250	1	5	37.0	2	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	15	42	12.5	9	1	3	.....	1	1	.....	.....	2	.....	.....	.....	1	4	.....
Ohio .... Cincinnati	280,000	40	87	16.2	20	.....	8	1	.....	.....	.....	.....	6	3	.....	.....	3	19	5
Cleveland	175,000	.....	68	20.3	2	1	15	2	.....	.....	5	.....	2	.....	.....	.....	1	.....	1
Gallipolis	5,500	.....	1	9.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	2	6	8.0	.....	.....	.....	1	1	.....	.....	.....	2	.....	.....	.....	.....	2	.....
Ind ..... Indianapolis	75,350	7	25	16.9	4	.....	6	.....	2	.....	.....	.....	5	.....	.....	.....	.....	8	1
Jeffersonville	9,542	.....	2	10.9	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richmond	13,000	.....	4	16.0	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evansville	30,000	.....	14	24.3	1	.....	2	.....	3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,298	42	221	22.9	21	4	74	14	2	1	6	.....	14	.....	.....	.....	.....	105	4
Aurora	12,059	.....	5	21.7	1	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Peoria	34,850	4	8	11.8	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Jacksonville	15,000	.....	3	10.5	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	.....	2	11.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Wis ..... Milwaukee	127,000	42	62	25.4	2	.....	11	1	1	.....	.....	.....	4	.....	.....	.....	.....	16	1
Beloit	5,000	.....	2	20.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn .... Saint Paul	41,800	9	14	17.3	.....	.....	7	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mich ... Lansing	10,000	2	6	31.3	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Flint	9,000	2	4	23.2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Iowa .... Burlington	20,000	4	8	20.9	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1
Dubuque	23,000	.....	6	13.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	15,800	1	2	6.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	30,000	4	6	10.5	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	3	4	8.3	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 7, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Cal ..... San Francisco	233,700	31	85	.....	14	1	11	.....	.....	1	1	.....	2	2	.....	1	.....	17	1
Sacramento	21,500	2	3	6.4	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Los Angeles	11,000	3	4	18.9	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	1	7.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,864,991	1,722	3,428	22.7	403	37	847	81	71	53	47	.....	165	19	29	10	36	940	87

NOTE.—Boston has 370,000 white, 5,000 colored; deaths, 252 white, 3 colored. Rate per 1,000, white 35.5, colored 31.3. Providence has 100,862 white, 4,000 colored; deaths, 42 white, 3 colored. Rate per 1,000, white 21.7, colored 39.1. Sing Sing has 7,250 white, 250 colored; deaths, 3 white, 1 colored. Rate per 1,000, white 21.6, colored 208.7. Wilmington, Del., has 38,000 white, 6,000 colored; deaths, 18 white, 2 colored. Rate per 1,000, white 19.9, colored 17.4. Baltimore has 338,384 white, 53,412 colored; deaths, 115 white, 43 colored. Rate per 1,000, white 17.7, colored 40.6. District of Columbia has 114,000 white, 56,000 colored; deaths, 43 white, 43 colored. Rate per 1,000, white 19.6, colored 39.9. Norfolk has 14,900 white, 11,300 colored; deaths, 5 white, 12 colored. Rate per 1,000, white 17.5, colored 55.3. Richmond has 37,953 white, 26,697 colored; deaths, 20 white, 20 colored. Rate per 1,000, white 22.2, colored 39.2. Lynchburg has 10,000 white, 11,000 colored; deaths, 3 white, 9 colored. Rate per 1,000, white 15.6, colored 42.6. Wilmington, N. C., has 6,714 white, 10,286 colored; deaths, white, none, 2 colored. Rate in table. Charleston has 25,000 white, 32,000 colored; deaths, 4 white, 22 colored. Rate per 1,000, white 8.32, colored 35.7. Savannah has 18,229 white, 15,019 colored; deaths, 2 white, 8 colored. Rate per 1,000, white 5.7, colored 27.7. Augusta has 16,182 white, 10,830 colored; deaths, 5 white, 5 colored. Rate per 1,000, white, 16.2 colored 23.4. Atlanta has 22,000 white, 16,000 colored; deaths, 4 white, 8 colored. Rate per 1,000, white 9.5, colored 26.2. Mobile has 28,000 white, 12,000 colored; deaths, 5 white, 6 colored. Rate per 1,000, white 9.3, colored 26.1. Selma has 2,425 white, 4,080 colored; deaths, 3 white, 4 colored. Rate per 1,000, white 64.6, colored 51.2. Jacksonville, Fla., has 6,000 white, 4,000 colored; deaths, 1 white, 3 colored. Rate per 1,000, white 8.7, colored 39.1. Columbus, Miss., has 3,500 white, 3,240 colored; deaths, white 2, colored none. Rate in table. New Orleans has 155,000 white, 55,000 colored; deaths, 41 white, 48 colored. Rate per 1,000, white 13.8, colored 45.5. Nashville has 27,874 white, 15,669 colored; deaths, 9 white, 15 colored. Rate per 1,000, white 16.4, colored 49.5. Clarksville has 4,000 white, 3,250 colored; deaths, 1 white, 4 colored. Rate per 1,000, white 13.0, colored 64.2. Louisville has 153,125 white, 21,875 colored; deaths, 32 white, 10 colored. Rate per 1,000, white 10.9, colored 24.5. Keokuk has 15,000 white, 800 colored; deaths, 1 white, colored, none. Rate in table. Austin has 12,000 white, 4,000 colored; deaths, 2 white, 2 colored. Rate per 1,000, white 8.7, colored 26.1. Natchez has 3,500 white, 3,500 colored; deaths, 3 white, 2 colored Rate per 1,000, white 42.7, colored 29.8. Total white population, 1,529,998; deaths, 616; annual rate per 1,000, 21.0. Totalcolored population, 389,208; deaths, 27.5; annual rate per 1,000, 36.9.

The following reports for the week ending August 7 are from places requiring burial permits and having less than 5,000 population:

Bridgewater, Mass., 4,000; deaths, 1; under five years, 1; whooping-cough 1. Brunswick, Ga., 2,900; deaths, 2; under five years, 1; diarrhœa 1, puerperal 1. Cambridge, N. Y., 1,850; deaths, 2; diphtheria 1, enteric fever 1. Edgartown, Mass., 1,400; deaths, 1. Fairfield, Conn., 3,748; deaths, 1. Murfreesborough, Tenn., 3,800; deaths, 2; consumption 1, colica 1. Tarrytown, N. Y., 3,276; deaths, 3; under five years, 2; diarrhœa 2. Total population, 20,974; deaths, 11; under 5 years, 4; annual rate per 1,000, 27.3.

The following reports for the week ending August 7 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; under 5 years, 1; consumption 2, diarrhœa 1. Allegheny, Pa., 78,000; deaths, 21; under 5 years, 11; consumption 4, diarrhœa 5, diphtheria 1, scarlet fever 1, measles 1. Bath, Me., 7,881; deaths, 5; consumption 1, diarrhœa 1, lung diseases 2. Battle Creek, Mich., 7,500; deaths, 5; under 5 years, 3; consumption 2, diarrhœa 3. Belfast, Me., 5,308; deaths, 5; under 5 years, 1; diarrhœa 1. Boulder, Colo., 3,030; deaths, 2; consumption 1. Brattleborough, Vt., 6,000; no deaths. Calais, Me., 6,170; deaths, 2; under 5 years, 1; enteric fever 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 1. Circleville, Ohio, 6,400; deaths, 2. Clinton, Mich., 1,205; deaths, 1. Corinth, Miss., 2,264; deaths, 1. Cumberland, Md., 12,000; deaths, 1; under 5 years, 1. Dallas, Tex., 10,300; deaths, 5; under 5 years, 1; consumption 1, enteric fever 3. Davenport, Iowa, 23,000; deaths, 8; under 5 years, 6; diarrhœa 2, diphtheria 1, scarlet fever 1, lung disease 1. Decatur, Miss., 1,000; deaths, 1; malarial fever 1. Fayette, Miss., 400; no deaths. Hernando, Miss., 1,200; deaths, none. Helena, Mont., 3,630; deaths, 1. Huntingdon, Pa., 4,500; no deaths. Huntingdon, Tenn., 1,200; no deaths. Indianola, Tex., 900; deaths, 1; under 5 years, 1; diphtheria 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; no deaths. Kenosha, Wis., 5,000; deaths, 2. La Salle, Ill., 10,000; deaths 4; under 5 years, 3; diarrhœa 3. Lebanon, Pa., 9,000; no deaths. Lousiana, Mo., 5,200; deaths, 2; consumption 1, diarrhœa 1. Madison, Ind., 9,009; deaths, 4; under 5 years, 1; scarlet fever 1. Mansfield, Ohio, 10,000; deaths, 2; under 5 years, 2; diarrhœa 2. Martinsburg, W. Va., 6,300; deaths, 3; under 5 years, 2; consumption 1, diarrhœa 1. Meridian, Miss., 4,013; deaths, 2; consumption 1. Milledgeville, Ga., 3,000; deaths, 1; puerperal 1. Muscatine, Iowa, 8,412; deaths, 4; under 5 years, 3; diarrhœa 3. Muskegon, Mich., 11,300; deaths, 8; under 5 years, 8; diarrhœa 6, measles 1, whooping-cough 1. Niles, Mich., 4,200; deaths, 1. Ocala, Fla., 1,000; deaths, none. Okolona, Miss., 2,000; deaths, none. Oshkosh, Wis., 17,030; deaths, 7; under 5 years, 5; diarrhœa 5, lung disease 1, accident 1. Painesville, Ohio, 5,000; deaths, 2; under 5 years, 1; consumption 1. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; deaths, 1; under 5 years, 1. Phœnixville, Pa., 6,692; deaths, 3; consumption 1, diarrhœa 2. Pleasant Hill, Miss., 253; no deaths. Port Royal, S. C., 750; no deaths. Portsmouth, Ohio, 2,320; deaths, 4; consumption 1. Raymond, Miss., 600; no deaths. Rock Island, Ill., 12,000; deaths, 6; under 5 years, 5; diarrhœa 2. Springfield, Ohio, 21,000; deaths, 5; under 5 years, 2; consumption 2, diarrhœa 1, malarial fever 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 1. Summit, Miss., 1,800; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; no deaths. Tuskaloosa, Ala., 2,000; deaths, 1; under 5 years, 1; malarial fever 1. Winona, Minn., 10,000; deaths, 3; under 5 years, 2; diarrhœa 2. Youngstown, Ohio, 15,089; deaths, 7; under 5 years, 5; consumption 1, diarrhœa 3. Total population, 421,209; deaths under 5 years, 65; total number of deaths, 140; annual death rate, 17.3 per 1,000.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE WEEK ENDING AUGUST 7, 1880.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	97	1	1	..	7	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	14	4	..	23
Albany Hospital	Albany, N. Y	do	125	48	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	12	12	1	47
Emigrant Hospital	New York, N. Y	do	462	57	1	..	2	9	..	..	..	..	2	1	4	..	..	..	..	..	4	1	2	..	2	..	..	..	..	..	..	..	1	2	..	..	..	2	..	10	..	..	..	..	6	3	10	50
Georgian Infirmary	Savannah, Ga	do	50	37	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	4	1	35
Hart's Island Hospital	Hart's Island, N. Y	do	300	248	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	21	1	241
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	30	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	7
Rochester City Hospital	Rochester, N. Y	do	125	59	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	..	60
Saint Mary's Hospital	do	do	320	233	1	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	3	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	7	7	1	232
Saint Michael's Hospital	Newark, N. J	do	130	142	2	1	..	11	..	..	..	..	1	..	3	..	..	..	..	..	1	..	2	9	6	..	16	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	24	23	3	140
Jewish Hospital	Philadelphia, Pa	do	40	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	4	..	27
Saint Mary's Hospital	do	do	80	21	1	1	1	4	..	..	..	..	..	1	..	5	..	..	..	..	4	2	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	6	6	1	20
Homeopathic Hospital	Pittsburgh, Pa	do	40	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	18
Freedmen's Hospital	Washington, D. C	do	300	235	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	23	11	5	242
Providence Hospital	do	do	160	128	1	2	2	21	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3	5	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	25	2	120
Freedmen's Hospital	Augusta, Ga	do	50	17	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	1	1	..	..	..	1	2	..	18
German Hospital	New York, N. Y	do	90	74	..	..	1	..	..	..	..	..	1	2	..	..	..	..	..	..	3	..	..	..	1	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	19	3	71
Cincinnati Hospital	Cincinnati, Ohio	do	300	296	2	5	1	1	..	..	..	..	2	2	..	7	..	..	..	..	4	3	..	9	..	5	..	6	..	..	..	..	1	..	..	2	..	4	..	..	..	..	..	..	57	57	6	295
Alexian Brothers Hospital	Chicago, Ill	do	70	52	2	..	1	8	..	..	..	..	3	2	..	1	..	..	..	..	1	..	1	5	3	..	6	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	21	1	64
Saint Luke's Hospital	Detroit, Mich	do	25	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	11
City Hospital	Saint Louis, Mo	do	411	247	3	1	..	17	..	..	..	..	6	8	3	23	..	..	..	..	..	..	2	19	4	2	37	..	..	..	..	..	3	..	2	3	..	..	..	..	..	..	..	..	77	64	12	248
Saint John's Hospital	do	do	75	21	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	5	1	19
Saint Louis Hospital	do	do	250	79	..	..	1	5	..	..	..	..	..	5	..	3	..	4	..	..	..	..	..	5	6	..	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	18	1	79
German Hospital	San Francisco, Cal	do	150	59	..	..	..	3	..	..	..	..	2	1	..	3	..	..	..	..	1	..	3	..	1	..	1	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	9	10	..	58
Naval Hospital	Chelsea, Mass	do	100	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	1	..	..	25
Do	Brooklyn, N. Y	do	115	34	..	..	..	3	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	34
Do	Washington, D. C	do	50	9	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	9
Do	Pensacola, Fla	do	20	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Riverside Hospital	New York, N. Y	Contagious diseases	150	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	3
Municipal Hospital	Philadelphia, Pa	do	8	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	3	1	11
Children's Hospital	Washington, D. C	Children	72	37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	..	30
State Hospital for Women and Children	Philadelphia, Pa	Women and children	18	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	18
Women's Hospital of Illinois	Chicago, Ill	Women	19	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	8
Insane Hospital	Augusta, Me	Insane	400	420	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	2	3	422
New Hampshire Asylum	Concord, N. H	do	300	289	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	290
Lunatic Hospital	Boston, Mass	do	200	160	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	162
State Lunatic Hospital	Worcester, Mass	do	650	519	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	521
Retreat for Insane	Hartford, Conn	do	150	140	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	1	..	140
Hospital for Insane	Middletown, Conn	do	515	517	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	519
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1256	1277	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	..	3	1283
Hudson River State Hospital	Poughkeepsie, N. Y	do	243	244	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	4	..	..	245
Marshall Infirmary	Troy, N. Y	do	142	133	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	8	..	..	130
Willard Asylum	Willard, N. Y	do	1594	1604	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	1	1604
State Hospital for Insane	Danville, Pa	do	700	471	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	473
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	579	583	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	2	1	..	586
Eastern Lunatic Asylum	Williamsburg, Va	do	330	315	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	..	..	..	328
North Carolina Insane Asylum	Raleigh, N. C	do	283	286	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	10	..	..	278
Alabama Insane Asylum	Tuscaloosa, Ala	do	406	407	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	..	..	409
State Lunatic Asylum	Austin, Tex	do	359	359	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	357
Longview Asylum	Carthage, Ohio	do	670	673	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	..	674
Michigan Asylum	Kalamazoo, Mich	do	660	657	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	6	..	..	655
Minnesota Hospital for Insane	Saint Peter, Minn	do	668	672	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	4	..	668
Insane Asylum	Saint Louis, Mo	do	329	338	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	5	1	..	339
Insane Asylum of California	Stockton, Cal	do	1117	1112	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	..	..	1114

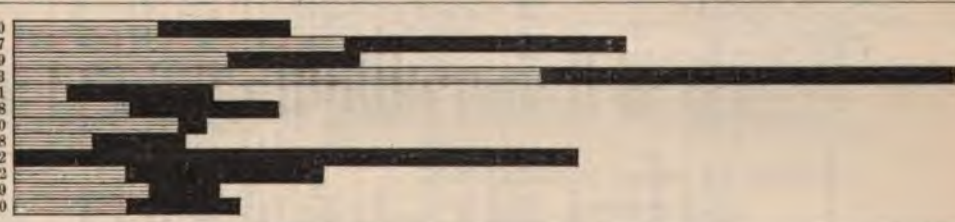
DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEATH FOR THE FIVE WEEKS ENDING JULY 3, 10, 17, 24, AND 31, FROM THE FOLLOWING PLACES.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	8.3	19.5
Concord, N. H	3.7	25.8
Boston, Mass	12.9	25.8
Cambridge, Mass	7.2	25.6
New Bedford, Mass	11.6	25.1
Newburyport, Mass	6.8	22.7
Marblehead, Mass	7.0	20.9
Plymouth, Mass	4.4	25.0
Lawrence, Mass	17.8	26.4
Worcester, Mass	16.4	28.4
Lowell, Mass	16.1	26.9
Brockton, Mass	3.1	12.3
Holyoke, Mass	14.7	25.6
Milford, Mass	6.4	11.7
Somerville, Mass	15.0	24.6
Fitchburg, Mass	8.3	17.4
Providence, R. I	6.1	24.2
New Haven, Conn	7.3	27.2
New Britain, Conn	18.6	28.3
Burlington, Vt	12.0	20.2
New York, N. Y	24.2	40.3
Brooklyn, N. Y	20.3	31.9
Yonkers, N. Y	15.9	24.5
Poughkeepsie, N. Y	10.8	20.6
Newburgh, N. Y	11.5	17.3
Utica, N. Y	2.7	9.8
Buffalo, N. Y	8.8	16.4
Hudson County, N. J	16.9	28.9
Orange, N. J	11.0	20.5
Plainfield, N. J	13.0	22.1
Philadelphia, Pa	14.1	27.0
Erie, Pa	6.2	12.7
Pittsburgh, Pa	14.4	24.3
Wilmington, Del	12.3	26.5
Baltimore, Md	13.5	25.5
District of Columbia	16.1	26.7
Norfolk, Va	18.7	35.8
Lynchburg, Va	9.4	20.8
Wilmington, N. C	13.0	22.5
Charleston, S. C	17.4	35.5
Augusta, Ga	11.2	28.9
Atlanta, Ga	12.3	24.4
Mobile, Ala	6.8	18.7
Selma, Ala	25.0	44.5
New Orleans, La	7.9	23.8
Shreveport, La	5.2	11.7
San Antonio, Tex	10.1	24.3
Nashville, Tenn	18.0	33.7
Chattanooga, Tenn	16.0	26.5
Clarksville, Tenn	8.6	18.7
Cincinnati, Ohio	10.0	20.5
Dayton, Ohio	12.0	22.2
Gallipolis, Ohio*	.....	15.2
Evansville, Ind	11.5	20.1
Indianapolis, Ind	15.1	25.5
Richmond, Ind	9.8	18.0
Aurora, Ill	5.2	16.4
Peoria, Ill	10.5	21.3
Jacksonville, Fla	2.8	11.8
Elgin, Ill	7.1	10.7
Milwaukee, Wis	18.5	26.6
Saint Paul, Minn	15.9	30.0
Keokuk, Iowa	3.3	10.5
Saint Louis, Mo	9.4	16.6
Omaha, Nebr	26.8	35.1
Salt Lake City, Utah	6.2	11.2
Sacramento, Cal	3.9	15.5
Los Angeles, Cal	15.1	27.5

DIAGRAM EXHIBITING THE SAME FOR THE MONTH OF JULY, 1880, FOR THE FOLLOWING PLACES.

Stamford, Conn	9.0	17.0
Amsterdam, N. Y	20.5	30.7
Elmira, N. Y	13.3	21.9
Kingston, N. Y	42.8	64.3
Little Falls, N. Y	3.4	12.1
Syracuse, N. Y	7.4	16.8
Vineland, N. J	10.5	12.0
Scranton, Pa	5.1	10.8
Brownsville, Tex*	.....	35.2
Mansfield, Ohio	7.2	19.2
Lansing, Mich	8.6	12.9
Watertown, Wis	7.0	14.0



* Deaths under 5 not given.

REPORT OF QUARANTINE INSPECTIONS AND OPERATIONS FOR MONTH ENDING JULY 31, 1880.

ARRIVED DURING THE MONTH.

Station.	Name of vessel.	Description of vessel.	Name of commander.	Where from.	Days of passage.	Date of arrival.	No. of crew.	No. of passengers.	Cargo.	Bill of health.	Sanitary condition of vessel.	Disposition of vessel, and remarks.
New Bedford, Mass.	J. A. Brown	Bark	H. T. Gregory	Talcuahano	67	June 27	10	0	Whale-oil	None	Good	Admitted to free pratique.
Do	Anna L. Taylor	do	W. V. Avery	St. Helena	45	July 4	10	3	do	Clean	do	Do.
Do	Varnum H. Hill	Brig	J. D. Sylvia	Dominique	90	July 20	22	0	do	do	do	Do.
Do	E. B. Philips	Bark	J. F. Francis	Cape de Verde and cruising.	*8	July 20	25	0	do	do	do	Do.
Do	John & Winthrop	do	E. P. Shiverick	Talcuahano	96	July 24	28	1	do	do	do	Do.
Philadelphia, Pa	Willie	Brig	Jos. E. Wood	Old Harbor, Jamaica	18	July 12	10	....	Logwood	None	do	Detained 24 hours on account of having no bill of health.
Norfolk Va	Federico	Steamer	Merrasturi	New Orleans	6	June 25	42	....	Cotton and oil-cake.	Clean	do	Pratique; allowed to take coal and deck load of cattle.
Do	Excel	Schooner	Lualam	Cat Island	5	July 2	10	....	Fruit	do	do	Pratique; free.
Do	B. & J. Baker	Steamer	Baker	Nassau via Bahama Banks.	5	July 7	20	....	Wrecking material.	do	do	Do.
Do	Enrique	do	Mugica	New Orleans	6	July 19	40	....	Cotton & grain	do	do	Pratique; allowed to take coal and cattle.
Charleston, S. C	Ursus Minor	Norwegian bark	C. Johnson	Rio de Janeiro	48	July 20	10	....	Rock ballast	Foul	do	Detained at quarantine as coming from an infected port.
Mobile, Ala	City of Ottawa	Bark	Griffin	do	42	July	16	....	Ballast	None	do	Ordered to quarantine; discharged July 19.
Do	City of Moule	Brig	Sinnet	Guadeloupe	16	July 10		....	do	Foul	do	Do.
Do	Alpha	do	Randle	Demerara	20	July 14	10	....	do	Clean	do	Quarantined; discharged July 27.
Do	R. W. Wood	Bark	E. L. Willar	Havana	14	July 25	9	....	do	Foul	Very bad	Quarantined; two of crew buried at sea.
Do	Anna	do	A. C. Lorange	Mexico	22	July 25	10	....	do	Clean	Good	Put in in distress; discharged July 27.
Do	Purisima Concepcion	Brig	Minor	Havana	10	July 26	11	..	do	Foul	Of ballast; bad.	Quarantined.
Pensacola, Fla	Alice	Steamer	G. W. Barrow	Mobile	1	June 28	9	..	None	None	Good	Free pratique.
Do	Mary Jenners	Barkentine	G. H. Oakes	Galveston	6	June 28	10	4	Ballast	Clean	do	Do.
Do	Mary Ida	Steamer	Robert Cothell	New Orleans	10	June 28		..	None	None	do	Do.
Do	Iside	Bark	A. Maguasco	Cape Town	51	July 1	14	..	Ballast	Clean	do	Quarantined; admitted to pratique July 8.
Do	Enchantress	do	H. Keating	Cardenas	7	July 1	11	..	do	do	do	Quarantined; admitted to pratique July 6.
Do	J. Bergman Olsen	do	J. O. Warmstrom	Santos	42	July 2	11	..	do	do	do	Quarantined; admitted to pratique July 9.
Do	Neptune	Steamer	John Miller	Cedar Keys	1	July 3	10	3	None	do	do	Free pratique.
Do	Albert Ross	Schooner	James Dellen	Apalachicola		July 5	3	4	do	None	do	Do.
Do	Mignonette	do	J. Bryson	Cedar Keys	3	July 5	13	..	Shingles	do	do	Do.
Do	Quattre Sorelle	Brig	L. C. Morasso	Cape Town	54	July 5	10		Ballast	Clean	Could be improv'd.	Quarantined.
Do	W. W. Horwood	do	F. A. Magone	New York	21	July 6	9		None	None	Good	Free pratique.
Do	Rocky Glen	Schooner	J. L. Bray	Galveston	6	July 7	9	....	Ballast	Clean	do	Do.
Do	Mary J. Cook	do	A. G. Cook	Mobile	1	July 9	8	....	None	None	do	Do.
Do	W. A. Watson	do	E. de Vig	Indianola	9	July 11		....	do	do	do	Do.
Do	J. M. McInnis	do	Jos. Fledges	New Orleans	4	July 11	4	2	Merchandise	do	do	Do.
Do	Venus	do	A. Bayonna	Matanzas	14	July 11	8	....	None	Clean	do	Quarantined and fumigated; released July 15.
Do	Sesti Dubrorachi	Bark	B. Jassich	Gibraltar	34	July 11	16	....	Ballast	do	do	Free pratique.
Do	Juanita	do	G. Maristany	Havana	10	July 12	14	....	do	Foul	do	Quarantined; released July 28.
Do	Capt. Madsen	do	N. Madsen	Rio	42	July 14	12	1	Coffee and ballast.	do	Could be improv'd.	Quarantined; released July 26.
Do	Miriam	do	A. H. Parker	New York	28	July 14	12	2	Merchandise and ballast.	None	Good	Free pratique.
Do	Chiegnote	do	W. R. Potter	Philadelphia	28	July 14	14	....	Ballast	do	do	Do.
Do	R. B. Gore	Brig	T. B. Hodgman	New York	22	July 14	10	....	do	do	do	Do.
Do	Mary Jeannette	Schooner	H. Crawford	New Orleans	4	July 14	4	1	Merchandise	do	do	Do.
Do	Amite	Steamer	William Castello	do	1	July 15	13	....	do	do	do	Do.
Do	L. B. Wing	Schooner	J. Whitmore	Aspinwall	12	July 15	8	1	None	Foul	do	Quarantined.
Do	Gov. Stone	do	E. Lyons	Mobile	1	July 16	2	2	Melons	Clean	do	Free pratique.
Do	Jas. Young	do	J. H. Young	Galveston	8	July 16		2	None	do	do	Do.
Do	Cecilia	do	J. M. Witherspoon	Apalachicola	4	July 17		3	do	None	do	Do.
Do	Lone Star	Sloop	Thomas Johnson	S. W. Pass	3	July 17		....	do	do	do	Do.
Do	A. L. Henderson	Schooner	A. H. Henderson	St. George	27	July 19		....	do	do	do	Do.
Do	Laurel	Steamer	P. L. Cosgrove	Key West	3	July 19	19	1	do	Clean	do	Do.
Do	Florence	Brig	John Flynn	Galveston	6	July 20		....	Ballast	do	do	Do.
Do	Martha	Schooner	George Herman	do	6	July 21		....	None	do	do	Do.
Do	Day Dream	Steamer	John Walker	Biloxi	1	July 21	10	3	do	None	do	Do.
Do	E. A. Sanchez	Barkentine	W. N. Fooks	Aspinwall	13	July 26	7	2	Ballast	Clean	do	Quarantine.
Do	Cassey Jameson	Schooner	W. A. Pressey	Port Lemoin	19	July 26	10	2	None	do	do	Do.
Do	Macedonia	Bark	W. Parker	Bahia	35	July 26	9	....	Ballast	None	Not good	Do.
Do	Boa Fe	Brig	P. A. des Reis	Santos	44	July 29	8	....	do	Clean	do	Do.
Do	C. A. McNeill	Bark	P. Crowell	New York	20	July 29	3	....	do	None	Good	Free pratique.
Do	Mary Parrett	Schooner	H. Crawford	Mobile	2	July 29	7	....	Merchandise	do	do	Do.
Do	A. P. Simonton	do	C. A. Packard	Portland, Me	28	July 30	10	....	None	do	do	Do.
Do	F. L. Carney	Bark	W. M. Fossett	New York	27	July 31	14	....	Ballast	do	do	Do.
Ship Island, Miss	Peruvienne	French bark	J. Lataste	Bordeaux	42	July 10	7	....	Stone ballast	Clean	do	Do.
Do	H. Buddig	Amer. schooner	A. H. Vose	Havana	10	July 11	9	....	None	do	do	Fumigated, &c.; released July 15.

* Months.

REPORT OF QUARANTINE INSPECTIONS AND OPERATIONS FOR MONTH ENDING JUNE 30, 1880—Continued.

Station.	Name of vessel.	Description of vessel.	Name of commander.	Where from.	Days of passage.	Date of arrival.	No. of crew.	No. of passengers.	Cargo.	Bill of health.	Sanitary condition of vessel.	Disposition of vessel, and remarks.
Ship Island, Miss	Carlos	Spanish brig	G. Carballayra	Sagua la Grande, Cuba.	10	July 12	9	....	Stone ballast	Clean	Fair	Fumigated, &c.; released July 17.
Do	Amigos	Spanish bark	J. Tellenia	Havana	9	July 14	14	....	Sand ballast	do	Excellent	Detained for observation.
Do	Pensem	French bark	J. Aubrunois	do	22	July 15	13	....	do	do	Good	Free pratique.
Do	Agnes Campbell	Norwegian bark	C. Nelson	Breke, Germany	44	July 15	7	....	None	None	Fair	Do.
Do	Robert Ruff	Amer. schooner	E. Marchiepang	Galveston	6	July 23	....	....	None	do	Fair	Do.
Bagdad, Mex	City of Mexico	Steamer	J. McIntosh	Vera Cruz, Tampa, and Tampico.	3	July 8	45	18	Merchandise	Clean	Good	Free pratique; passengers detained 90 hours for fumigation.
Do	....do	....do	....do	New Orleans	3	July 19	45	25	....do	....do	....do	Free pratique.
Do	....do	....do	....do	Vera Cruz	3	July 29	45	15	....do	....do	....do	Do.

REMAINING IN QUARANTINE AT DATE OF LAST REPORT.

Station.	Name of vessel.	Description of vessel.	Date when placed in quarantine.	Disposition of vessel, and remarks.
Charleston, S. C	Ursus Minor	Norwegian bark	July 20	Detained for quarantine.
Mobile, Ala	Purisima Concepcion	Brig	July 26	Do.
Pensacola, Fla	Quattre Sorelle	do	July 5	Do.
Do	L. B. Wing	Schooner	July 15	Do.
Do	E. A. Sanchez	Barkentine	July 26	Do.
Do	Cassey Jameson	Schooner	July 26	Do.
Do	Macedonia	Bark	July 26	Do.
Do	Boa Fe	Brig	July 29	Do.
Ship Island, Miss	Amigos	Spanish bark	July 14	Detained for observation.

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MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	July 31	3	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
Prince Edward Isl'd	Charlottetown	12,000	Aug. 7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.6
Canada	Kingston	16,000	July 31	4	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Montreal	135,000	Aug. 7	69	26.7	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	4	64.8
Cuba	Havana	195,437	July 31	208	55.5	.....	.....	.....	54	.....	11	.....	6	.....	.....	.....	.....	85
Hayti	Port au Prince	30,000	July 7	24	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
Do	....do	30,000	July 14	22	38.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93
Do	....do	30,000	July 21	17	29.6	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	93
Do	....do	30,000	July 28	17	29.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93
Do	Aux Cayes	9,000	July 3	2	11.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	....do	9,000	July 10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	....do	9,000	July 17	5	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Do	....do	9,000	July 24	3	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
West Indies	Turks and Caicos Isl'ds	3,500	July 10	5	74.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	.do	3,500	July 17	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	....do	3,500	July 24	3	43.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Guadeloupe	Point-a-Pitre	22,919	July 18	14	31.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	.do	22,919	July 24	9	20.5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Azores	Fayal, Horta	7,630	June 5	2	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Do	....do	7,630	June 12	2	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
Do	....do	7,630	June 19	4	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
Do	....do	7,630	June 26	3	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Do	....do	7,630	July 3	5	19.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
Teneriffe	Santa Cruz	16,610	July 3	12	37.7	.....	.....	.....	.....	.....	.....	4	2	.....	.....	.....	2	76
Do	....do	16,610	July 10	6	18.8	.....	.....	.....	.....	.....	.....	4	2	.....	.....	.....	3	76
Do	....do	16,610	July 17	9	28.4	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	71
St. Helena	Jamestown	6,240	July 17	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74.2
Ireland	Queenstown	10,000	July 31	6	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	July 24	96	27.4	.....	.....	.....	.....	5	.....	9	3	.....	.....	4	2	57.1
Do	....do	230,000	July 31	103	29.4	.....	.....	.....	.....	4	.....	13	4	.....	.....	.....	5	56.7
Do	Dublin	314,666	July 24	182	30.1	.....	.....	.....	.....	.....	9	.....	4	.....	.....	.....	27	.....
Do	....do	314,666	July 31	170	28.1	.....	.....	.....	.....	.....	7	.....	1	.....	5	.....	19	.....
Scotland	Dundee	155,100	July 26	52	17.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	1	59
Do	Glasgow	589,598	July 24	197	17.4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	21	58.8
Do	Leith	58,479	July 31	23	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	58
England	London	3,254,260	July 24	1,482	21.1	.....	.....	.....	.....	.....	3	.....	12	.....	1	.....	133	.....
Do	Bristol and Clifton	213,500	July 24	98	23.9	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	5	62.4
Do	Tunstall	193,175	July 24	67	18.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Do	Liverpool	544,056	July 24	271	26.0	.....	.....	.....	.....	.....	.....	7	5	13	1	22	23	60
Do	....do	544,056	July 31	295	28.3	.....	.....	.....	.....	.....	.....	2	3	6	2	29	30	59.7
Wales	Cardiff	82,364	July 31	25	15.7	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	5	.....
France	Lyons	342,815	June 26	149	22.7	.....	.....	.....	.....	.....	6	.....	1	.....	.....	.....	7	.....
Do	....do	342,815	July 10	151	23.0	.....	.....	.....	.....	.....	5	.....	2	.....	.....	.....	5	.....
Do	....do	342,815	July 17	202	33.5	.....	.....	.....	.....	.....	12	.....	5	.....	.....	.....	7	.....
Do	Paris	1,988,806	July 22	1,130	29.5	.....	.....	.....	.....	.....	41	.....	16	.....	.....	.....	130	.....
Do	Rouen	104,902	July 30	62	30.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Zurich	22,103	July 24	9	21.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Geneva	52,077	July 10	13	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Rotterdam	150,378	July 31	66	22.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	1	.....
Do	Amsterdam	316,952	July 24	152	25.0	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	65
Germany	Berlin	1,096,644	July 17	840	39.8	.....	.....	.....	.....	.....	.....	29	7	.....	.....	144	59	77
Do	Breslau	276,000	July 17	266	50.2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	113	68
Do	Frankfort	128,000	July 17	63	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	73
Do	....do	128,000	July 24	64	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	68
Do	Hamburg	400,000	July 10	199	25.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	8	.....
Do	Brunswick	74,000	July 24	28	19.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Bremen	109,000	July 17	48	23.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Mannheim	50,500	July 31	29	30.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
Saxony	Leipsic	150,836	July 24	86	29.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	64
Do	Dresden	220,500	July 17	120	29.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	11	68
Bavaria	Nuremberg	100,000	July 17	54	28.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	68
Do	....do	100,000	July 24	55	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	65
Belgium	Brussels	406,638	July 24	164	20.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Denmark	Copenhagen	235,254	July 20	138	29.0	.....	.....	.....	.....	.....	.....	5	1	.....	.....	14	.....	66
Austria	Vienna	746,243	July 24	391	24.5	.....	.....	.....	.....	.....	8	.....	4	.....	.....	.....	.....	70
Hungary	Buda-Pesth	344,904	July 17	297	44.9	.....	.....	.....	.....	.....	13	.....	7	.....	.....	.....	.....	.....
Russian Poland	Warsaw	357,169	July 17	184	27.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Sweden	Stockholm	169,429	July 17	115	36.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	10	68
Norway	Christiania	116,801	July 17	60	26.7	.....	.....	.....	.....	12	3	1	.....	.....	.....	6	5	69
Do	....do	116,801	July 24	58	25.8	.....	.....	.....	.....	8	2	3	.....	.....	.....	3	5	59
Spain	Carthagena	76,000	July 25	40	27.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
Do	Cadiz	65,028	July 24	59	47.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	Alicante	34,926	July 31	24	35.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
Barbary	Tripoli	20,000	July 24	9	23.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.6
Cape Colony	Cape Town	35,000	July 5	15	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
Do	....do	35,000	July 12	25	37.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Egypt	Alexandria	220,000	July 17	198	46.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	220,000	July 24	207	49.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
India	Calcutta	429,535	June 26	132	16.2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1	82.5
Do	Bombay	644,405	June 29	376	27.7	.....	.....	.....	.....	.....	4	.....	1	.....	.....	.....	13	.....

National Board of Health

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MONTHLY REVIEW OF MORTALITY, FOR JULY, 1880.

The review for June showed a loss of over 96,000 in the mean population, as compared with April; this month there is a further reduction of 68,720, leaving 8,061,454 as the mean for July. It has been noted that the falling off in the population represented in the tables is chiefly due to irregularity in the reports of some of the larger cities. It is also to be observed that the results of the tenth census, taken in June, while showing a considerable increase in the total population of the country, also prove that many cities have greatly over-estimated their rate of increase, and given rise to corresponding errors in their computed death-rates. No official reports having yet been made by the Census Bureau, the populations of cities in the table have been changed only when corrected on the reports of mortality, or by notice from the municipal authorities. A comparison of the total population of 34 cities, before and after such corrections, indicates that while certain places were estimated much too high or too low, the total of the reports will not be changed sufficiently to have much effect on the general death-rate of the country. This death-rate for the 5 weeks ending July 31 was 26.66, against 22.05 for June; the two months show a great variation from one week to another, the rate rising from 19.46 June 5 to a maximum of 31.44 July 3, and then falling, with some oscillations, to 23.44 at the end of the month. These changes have been controlled by the movement of heat diseases, as will be shown. The deaths under 5 years contribute most to the increased mortality, the rate having risen from 8.04 June 5 to 18.44 July 3, or 129 per cent., while the general death-rate increased less than 62 per cent. in the same time. The highest mortality under 5 years reached 58.5 per cent. of all deaths.

The increase of mortality due to the prevalence of heat diseases was not considered with reference to races last month, as the effects of temperature had not then been fully developed in all parts of the country. It will be seen below that the maximum rate for the whole country was attained July 3, and that for the Southeast division in the latter part of June. It is observed that the death-rate in those cities which separate the two races in their reports reached a maximum of 24.2 for the white population July 3, beginning at 20.5 June 5, and falling to 21.0 at the end of July. The difference between the extreme rates in the two months was only 4.9, the least being 19.3 July 24. The rate for the colored population reached its maximum of 48.1 June 19, and this high rate evidently determined the period of highest general death-rate for the Southeast section, which contains nearly the whole colored population. The lowest rate for the colored people in the two months was 33.9, July 31, the difference between the extremes being 14.2. This would indicate that the colored race was much more affected by heat diseases than the white, and such was probably the case, owing to the defective hygienic conditions so prevalent among the colored population in all cities, and especially to the want of care in the selection and use of food. The absence of proper care for children both in health and sickness also contributed to raise the rate of infant mortality, and the correspondence of the Bulletin shows that for various reasons medical attendance is often wanting in sickness among the colored people.

It is held by many observers that the conditions here mentioned, with other circumstances, sufficiently account for the difference in mortality without reference to difference of race. A careful investigation of the diseases and death-rate of white populations living under conditions more or less similar to those of the colored people in our cities might assist in estimating the true weight of the difference of race in relation to disease and mortality.

TABLE A.—PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
July 3	7,537,580	4,542	31.44	2,664	18.44	58.52	613	4.24	13.49	406	2.81	8.94	207	1.43	4.55	90	0.62	1.98	58	0.40	1.28
July 10	7,967,025	4,228	27.69	2,355	15.42	55.70	626	4.10	14.80	441	2.89	10.43	185	1.21	4.38	137	0.90	3.24	95	0.62	2.24
July 17	8,355,305	4,490	28.04	2,453	15.32	54.63	538	3.36	11.98	380	2.37	8.46	158	0.99	3.52	133	0.83	2.96	105	0.66	2.34
July 24	8,274,747	3,663	23.10	1,914	12.07	52.25	529	3.34	14.44	397	2.50	10.84	132	0.84	3.63	130	0.82	3.55	97	0.61	2.65
July 31	8,172,611	3,674	23.44	1,788	11.42	48.66	620	3.96	16.88	460	2.94	12.52	160	1.02	4.35	113	0.72	3.08	92	0.60	2.50
Totals	40,307,268	20,597	.....	11,174	.....	.....	2,926	.....	.....	2,084	.....	.....	842	.....	.....	603	.....	.....	447	.....	.....
Means	8,061,454	4,119½	26.66	2,234½	14.46	54.25	585½	3.79	14.20	416¾	2.70	10.11	168¾	1.09	4.09	120⅝	0.78	2.93	89⅞	0.58	2.16

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
July 3	32	0.22	0.70	60	0.42	1.32	1,820	12.60	40.1	45	0.31	0.99	41	0.28	0.90	48	0.33	1.05	52	0.36	1.14	1
July 10	42	0.28	1.00	48	0.31	1.13	1,379	9.03	32.6	56	0.37	1.32	40	0.26	0.94	34	0.22	0.80	58	0.38	1.37	2
July 17	28	0.18	0.62	57	0.36	1.27	1,035	6.46	23.0	67	0.42	1.49	37	0.23	0.82	45	0.28	1.00	59	0.37	1.31	3
July 24	33	0.21	0.90	45	0.29	1.23	1,089	6.86	29.7	52	0.33	1.42	18	0.11	0.49	38	0.24	1.04	50	0.32	1.36	1
July 31	21	0.13	0.57	44	0.28	1.20	916	5.85	24.9	66	0.42	1.80	17	0.11	0.46	43	0.27	1.17	48	0.31	1.31	4
Totals	156	.....	.....	254	.....	.....	6,239	.....	.....	286	.....	.....	153	.....	.....	208	.....	.....	267	.....	.....	11
Means	31⅛	0.20	0.75	50¾	0.33	1.23	1,247¾	8.08	30.3	57⅛	0.37	1.39	30⅝	0.20	0.74	41⅝	0.27	1.01	53⅜	0.35	1.29	2⅛

Causes of death.—Consumption and acute lung diseases combined still occupy the second place in order of fatality, and their rate shows a further decline of 9 per cent. since June, having fallen from 4.16 to 3.79 per 1,000. In this reduction consumption has no part, having increased from 2.59 to 2.70, while lung diseases have fallen from 1.58 to 1.09, or 31 per cent. The following changes are noted in the six principal zymotic diseases: *Increased*, diphtheria, from 0.56 to 0.58, or 3.6 per cent.; enteric fever, from 0.27 to 0.37, or 37 per cent.; whooping-cough, from 0.24 to 0.27, or 12.5 per cent., and malarial fevers, from 0.29 to 0.35, or 20.7 per cent. The increase of the last named diseases is proper to the season, but it is not easy to explain the marked advance of enteric fever, which usually prevails most as an autumnal disease. The rise in the death-rate for the other two will be explained below. *Decreased*, scarlet fever, from 0.43 to 0.33, or 23.3 per cent., and measles, from 0.29 to 0.20, or 31 per cent. The result is an increase of only 2 per 1,000 in the total mortality of the six diseases since June, and the rapid decline of measles and scarlet fever, with the upward movement of enteric and malarial fevers, are

the most important changes in this class. Diarrhœal diseases have taken the first place among the causes of death since the latter part of June, when their rate was equal to that of consumption and acute lung diseases combined. By the 26th of June, the rate had reached 7.92 per 1,000, which was 0.92 above the highest point attained last year, and July 3 showed the enormous rate of 12.60 per 1,000 for this one class of heat diseases. This climax was followed by a less rapid decline, and the rate was 5.85 at the end of the month; at its height, the rate was over 40 per cent. of deaths from all causes, the pulmonary diseases showing only 13.5 per cent. at the same time. In 1879, the maximum rate of diarrhœal diseases was on July 17, and was only 7 per 1,000. Small-pox is still occasionally reported from Chicago, Philadelphia, and New York, but does not seem to be epidemic at any place in the United States. During the month of July infected vessels arrived at several ports of this country from South America and the West Indies, and deaths from yellow fever have been reported at the Mobile and New York quarantine stations. At New Orleans the *Excelsior* was only discovered to be infected after discharging her cargo, and one of her crew died of yellow fever in the city; but neither there nor elsewhere has the disease spread beyond those originally infected from the vessels.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,541,412	12,885	29.40	1,862	4.25	14.45	1,322	3.02	10.26	540	1.23	4.19	383	0.87	2.97	281	0.64	2.18
Southeast	1,392,089	3,325	24.92	530	3.97	15.94	415	3.11	12.48	115	0.86	3.46	58	0.43	1.74	42	0.31	1.26
Northwest	1,822,612	3,985	22.82	461	2.64	11.57	298	1.71	7.48	163	0.93	4.09	152	0.87	3.81	120	0.69	3.01

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	102	0.23	0.79	125	0.28	0.97	4,436	10.12	34.42	139	0.32	1.08	68	0.15	0.53	92	0.21	0.71	92	0.21	0.71	8
Southeast	16	0.12	0.48	63	0.47	1.89	621	4.65	18.68	93	0.70	2.80	31	0.23	0.93	67	0.50	2.01	104	0.78	3.13	.....
Northwest	32	0.18	0.80	64	0.36	1.60	1,150	6.58	28.86	48	0.27	1.20	47	0.27	1.18	47	0.27	1.18	68	0.39	1.70	3

Distribution of diseases.—The mortality from consumption and lung diseases has been for some time comparatively high in the Southeast section, and there the greatest reduction is observed this month, the rate having fallen 14.4 per cent. to 10.3 per cent. in the Northeast, and only 1 per cent. in the Northwest. As usual, the greatest change has been in lung diseases. Since June the rates have fallen as follows, taking the sections in the order of the table: 33.9, 40.7, and 16.2 per cent. Consumption has lost but 2.5 per cent. in the Southeast, while the rate has risen 4.5 in the Northeast and 9.6 per cent. in the Northwest sections. The increase noted above in diphtheria has been confined to the Northwest, where the rate has risen from 0.53 to 0.69, or 30 per cent.; in the Northeast it remains stationary at 0.64, but in the Southeast there is a decline from 0.34 to 0.31, or 9 per cent. Whooping-cough, having reached the high rate of 0.59 in the Southeast, has fallen to 0.50, or 15 per cent., in that section, while the rates having gone down to 0.15 in the Northeast and 0.20 in the Northwest, have now risen to 0.21 and 0.27, or 40 and 35 per cent., respectively, in those sections. The movements of these diseases are to be explained chiefly by the presence or absence of available material in different localities. The notable exemption of the Southeast from certain zymotics for many months has naturally been followed by an invasion of those diseases among the unprotected, while the decline of the epidemics in other sections was due to the death or recovery and consequent protection of the subjects there. This ebb and flow of mortality must mark the course of such diseases as are likely to occur but once in the same person, and against whose contagion or infection no certain prophylactic has been discovered. The marked decline in the rate for measles, of 35, 36, and 33 per cent. in the order of the sections seems to argue a general approach to exhaustion of available material for that disease. Diarrhœal diseases have followed the movement of the heat-wave; its first impact being upon the Southeast section, the death-rate from diarrhœal diseases reached a maximum of 7.23 per 1,000 in that section in June. Crossing the Gulf States from west to east, the isothermal lines sweep around the southern end of the Appalachian range, and, as shown on one of the maps of the Signal Service for July, carry a mean temperature of 80° up to the capes of the Chesapeake. Baltimore reached a maximum death-rate of 16 per 1,000 by June 12; New York of 29.3 per 1,000 July 3, and Boston 15.7 per 1,000 July 31. The highest rate in New Orleans was on June 12, being then 7 per 1,000 per annum. The cities of the Northwest show great irregularities in the times and degrees of greatest mortality, owing to their various elevations and other local conditions. The wide differences of maximum mortality from diarrhœal diseases in the four cities above named may be referred to the following conditions, upon which the morbific effects of heat chiefly depend: 1. A sudden elevation of temperature is more potent in causing disease than a gradual rise to a much higher point; 2. The amount of difference between the maximum temperature of any place and its annual mean, which, in the United States, is generally reached about April 21, is an important factor; the summer mortality is usually in proportion to this difference; 3. The proportion of children in any given population will materially affect the death-rate; 4. The general condition of the people, as to aggregation, hygienic conditions, occupations, habits of food and drink, and previous state of health, must influence their resistance to the effects of heat. Taking the mean mortality for the month from diarrhœal diseases, the highest rates were 7.23 in the Southeast, 6.58 in the Northwest, and 10.12 in the Northeast.

A BILL TO RECHARTER THE SOUTH CAROLINA MEDICAL ASSOCIATION AND ESTABLISH A STATE BOARD OF HEALTH, AND TO DEFINE ITS DUTIES.

Be it enacted by the senate and house of representatives, now met and sitting in general assembly, and by the authority of the same:

SECTION 1. That the charter of incorporation of the South Carolina Medical Association granted by the act of the general assembly of the State of South Carolina, entitled "An act to incorporate certain societies of South Carolina, and to renew certain charters heretofore granted," passed on the nineteenth day of December, one thousand eight hundred and forty-eight, with the rights and privileges therein contained, be revived and made of force and continued for the term of fourteen years.

SEC. 2. That S. S. Marshall, M. D., president; F. L. Parker, M. D., first vice-president; J. B. Du Bose, M. D., second vice-president; J. J. Horton, M. D., third vice-president; H. D. Fraser, M. D., corresponding secretary; A. S. Hydrick, M. D., recording secretary; T. Grange Simons, M. D., treasurer, and their associates, members of the South Carolina Medical Association, and their successors, in their corporate capacity, together with the attorney and comptroller generals of the State, and their successors in office, be, and the same are hereby, created a board of health for the State of South Carolina, to be known as the State board of health.

SEC. 3. That the said South Carolina Medical Association, with the State officers above named, are hereby invested with all the rights, and charged with all the duties pertaining to organizations of like character, and said board of health, so constituted and established, shall be the sole adviser of the State on all questions involving the protection of the public health within its limits, and it shall be the duty of the said board to make an annual report to the legislature on all matters relating to its action.

SEC. 4. That the said association, at its first meeting succeeding the passage of this act, and every seven years thereafter, shall select seven (7) members, to be recommended to the governor, who shall appoint them to co-operate with the State officers above named, to constitute an executive committee, having power to act in the intervals of the meetings of the State board of health. This committee shall make, annually, a detailed report to the State board of health. Members of this committee shall be removable at the pleasure of the

governor, by him at the request of the State board of health, or for neglect of duty, or other causes set forth by the majority of the members of the executive committee. Vacancies shall be filled by appointment by the governor, on recommendation of the State board of health, or of the executive committee, when such vacancies occur in the intervals of the meetings of the association.

SEC. 5. That this executive committee shall, immediately after their appointment, proceed to organize by electing a chairman and secretary, the latter to be *ex-officio* registrar-general of the State. That they be authorized and empowered to divide the State into health districts, and in those districts in which no local boards of health exist they be required to appoint sub-boards of health, which shall consist of two (2) practicing physicians and one (1) layman. In all cases where local boards of health have already been established, these shall be subject to the supervisory and advisory control of the State board of health, through its executive committee. They shall pass no ordinances, nor consider any such of force, as are repugnant to the rules and regulations of the State board of health.

SEC. 6. That it shall be the duty of the State board of health, through its representatives, to investigate the causes, character, and means of preventing such epidemic and endemic diseases as the State is liable to suffer from; the influence of climate, localities, occupations, habits, drainage, scavengering, water supply, heating, and ventilation; and shall make inspections annually, or oftener if necessary, of the sanitary condition of all institutions provided as State charities or supported at the public expense.

SEC. 7. That the sub-boards, constituted as provided in section 5, and local boards of health already organized, are charged with the duty of investigating, within their districts, all matters of sanitary interest, or scientific importance, bearing in any wise upon the protection of the public health; and shall report to the executive committee at such times and in such manner and form as the executive committee may prescribe.

SEC. 8. The State board of health shall supervise and control the quarantine system of the State, and shall annually, or oftener if necessary, require reports from the health officer, on such forms as may be prescribed, in all matters pertaining to quarantine. They shall also be authorized to establish quarantine both by land and sea. This quarantine shall not be established except by the advice and consent of the governor.

SEC. 9. That it shall be the duty of the executive committee of the State board of health to recommend such provisions of law as shall be deemed necessary for the thorough organization of a system of registration of vital statistics throughout the State, and shall prepare the necessary methods and forms for obtaining and preserving such statistics.

SEC. 10. For the purpose of carrying out the provisions of this act the sum of two thousand dollars be, and the same is hereby, appropriated, to be paid by the treasurer on the order of the chairman of the executive committee, countersigned by the comptroller-general.

SEC. 11. This act shall take effect from the date of its passage; and all acts and parts of acts inconsistent herewith be, and the same are hereby, repealed.

ABSTRACTS FROM CONSULAR REPORTS.

FLUSHING, NETHERLANDS.—The report for the last two weeks of July notes only 4 deaths, all under 15 years of age. One was from typhoid and one from typhus fever; population not given; general sanitary condition good.

GHENT, BELGIUM.—United States Consul S. Spackman reports for the month of June 305 deaths in a population of 130,670, being at the rate of 28 per 1,000 per annum. Cholera caused 2 deaths, small-pox 6, typhoid fever 6, and other contagious diseases 3. There were 35 deaths from consumption, 21 from other lung diseases, and 93 from diarrhœal diseases, chiefly among very young children.

HAVANA, CUBA.—For the week ending August 13 there were 42 deaths from yellow fever in the city, but the mortality is small compared with the number of cases, the disease being of a mild form. It is estimated that there were about 150 cases in the city at the above date.

LAMBAYEQUE, PERU.—The report of United States Consul S. C. Montjoy for this department, dated June 30, states that statistics of diseases and deaths cannot be obtained. The population is estimated at 100,000; the sanitary condition is usually considered good, but at present croup, diphtheria, and small-pox prevail and are very fatal. Typhoid and scarlet fevers are also common, but of milder type.

MALTA AND GOZO—United States Consul C. B. Eynaud reports 160 deaths for the two weeks ending July 15; population 153,500; annual death-rate 27.1 per 1,000; mean temperature 79°.5. Two deaths are noted from small-pox, 4 from typhoid, and 1 from typhus fever. Among other causes of death were: diarrhœal diseases 47, consumption 3, other lung diseases 6, heart diseases 4, old age 8, accident 1; 9 still-births not included in the deaths.

MAZATLAN, MEXICO.—United States Consul E. G. Kelton reports the town in fair sanitary condition, and no epidemic or contagious diseases prevailing. There were 52 deaths from all causes during the month of June, in a population of 14,000, being at the annual rate of 44.5 per 1,000. Among the causes of death were: dysentery and diarrhœa, 7; "fever," 10; consumption, 2; and *tetanus*, 9. This latter disease is often noted in the reports as "tetanus of children," and, no doubt, means "convulsions."

MOSCOW, RUSSIA.—The report for the month of April shows 2,607 deaths; the population being 601,970; the annual death-rate was nearly 52 per 1,000. There were 1,203 deaths under 5 years of age, being 46 per cent. of all deaths. Among the causes noted were: small-pox 9 deaths, typhoid fever 197, other contagious diseases 193, diarrhœal diseases 345, diseases of the respiratory organs, including consumption, 786. The almost total absence of drainage, with the bad condition of paving, &c., chiefly accounts for the high death-rate; improvements in this direction are making, but very slowly. The climate is usually very favorable to health.

NASSAU, BAHAMAS.—United States Vice-Consul S. P. Saunders, under date of August 11, refers to his report of yellow fever on the island of New Providence. He reports further, that during the week ending July 17 there were 15 cases and 6 deaths; July 24, 20 cases and 2 deaths; July 31, 11 cases and 4 deaths; August 7, 5 cases and 1 death—total, 51 cases and 13 deaths. The disease reached its climax about the middle of July, when the weather was very hot and dry; with August came cooler weather, and the disease abated. The fever has been chiefly confined to children under 15 years, and the few unacclimated adults who were attacked all died. One of these had been a resident of the island for seven consecutive years. It is remarkable that no adult native of the island was attacked, yet the natives of other and neighboring islands coming here were very liable to contract the disease, and seldom recovered from it. These persons were supposed to be acclimated and safe from yellow fever. The meteorological department of the city reports that the test-papers showed no ozone in the atmosphere during the hot weather when the fever prevailed, but became highly discolored on the change of weather which marked the abatement of the disease. The authorities have been active in enforcing all sanitary measures, and the town is now very clean.

The last visitation of yellow fever was in 1869, when the disease was introduced by a British ship-of war. Since then the island has been very healthy at all seasons until the present epidemic.

ROUEN, FRANCE, August 7.—United States Consul A. Rhodes reports that although small-pox prevails, the masters of vessels seldom take bills of health from his consulate, saying that "the health officers of New York and most other ports of the United States do not ask for them."

SABANILLA, UNITED STATES OF COLOMBIA.—United States Consul E. P. Pellet, under date of July 31, reports the death of a sister of charity from yellow fever in the hospital at Baranquilla; the sister had recently arrived, and no other case had yet occurred. While awaiting the possible spread of the disease, the issue of clean bills of health has been suspended.

SANTA CRUZ, TENERIFFE, CANARIES.—United States Consul W. H. Dabney reports for the month of June 36 deaths and 38 births. The death-rate was 26.1 and the birth-rate 27.5 per 1,000. Of the decedents 9 were under 1 year, 16 under 5 years, and 4 over 75 years of age.

SHEFFIELD, ENGLAND.—The following report of births and deaths in the borough of Sheffield is for the four weeks ending June 5: Births, 891, of which 464 were males; annual rate per 1,000, 38.1. Deaths 478; annual rate per 1,000, 20.5. Only one case of small-pox is noted, being the first since May, 1878; the disease occurred in a child who died of bronchitis after recovery from the small-pox. Scarlet fever caused 23 deaths, whooping-cough 16; there were 222 deaths under 5 years and 9 over 80 years of age; 19 deaths were from unknown causes. The highest temperature noted was 70°, lowest 32°, mean 51°.1; mean humidity 75; rain-fall 2.20 inches.

For the quarter ending June 26, 2,853 births were registered, of which 1,431 were females; annual rate 37.6 per 1,000. Deaths, 1,613, of which 867 were males; annual rate 21.2 per 1,000. There were 15 deaths from measles, 98 from scarlet fever, 59 from "fever," 23 from diarrhœa, and 71 from causes not ascertained. The mean temperature for the quarter was 50°.3, highest 75°, lowest 31°; mean humidity 78; rain-fall 7.04 inches for the 13 weeks.

ST. JOHN, NEW BRUNSWICK.—United States Consul D. B. Warner reports a total of 78 deaths for the five weeks ending July 31, but gives neither the causes of death nor the population.

VALPARAISO, CHILI.—United States Consul L. H. Foote sends the following reports: During the month of May there were 386 deaths in a population of 101,100; death-rate 45.8. Lung diseases caused 74 deaths, fevers 97, small-pox 31, consumption 50, other diseases 134. In June, the deaths were 338, and the annual rate 40.1 per 1,000. The sanitary condition of the city is improving.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

LOS ANGELES, CAL.—Dr. Walter Lindley, under date of August 3, gives the following account of the climate and meteorology of this place:

Medical gentlemen in Brooklyn, Boston, New York, Baltimore, and other Eastern cities have been constantly sending me letters full of questions in regard to the climate of Los Angeles, and asking me what effect I thought it would have on certain patients of theirs who had pulmonary troubles. I commenced answering their communications, but the task became too great, and I now ask you, through the BULLETIN, to convey to them the following facts: The sun shines brightly in Los Angeles three hundred and forty days in the year. The following tables, prepared from the reports of the United States Signal Service in Los Angeles, by D. M. Graham, esq., and published in the Semi-Tropic California, are very valuable to those who contemplate sending patients here:

TABLE No. I.—*Rainfall.*

	1877–'78.		1878–'79.		1879–'80.		Monthly average.
	Inches.	Days.	Inches.	Days.	Inches.	Days.	
July	.0	1	.0	0	.0	0	.0
August	.0	2	.0	1	.0	0	.0
September	.0	1	.0	0	.0	0	.0
October	.86	2	.14	3	.93	3	.64
November	.45	1	.0	1	3.44	3	1.29
December	3.93	8	4.70	4	6.53	10	5.05
January	3.33	10	3.59	9	1.33	5	2.75
February	7.68	14	.97	7	1.56	8	3.40
March	2.57	10	.49	6	1.45	6	1.50
April	1.71	8	1.19	6	5.06	10	2.65
May	.66	11	.24	2	.04	1	.31
June	.07	5	.03	2	.03	2	.03
Totals	21.26	73	11.35	41	20.34	48	17.62

Annual average, 17.62 inches.

TABLE No. II.—*Temperature.*

Month.	Mean.	A. M.	P. M.	Midnight.	Maximum.	Minimum.	Difference.
1877.							
July	71.1	63.7	80.7	68.8	93	55	38
August	70.1	61.8	79.9	68.4	87	56	31
September	69.8	61.6	79.6	67.6	93	57	41
October	63.4	56.6	71.1	62.4	70	43	37
November	62.1	53.6	73.1	59.6	86	45	41
December	55.3	49.5	63.9	54.5	81	36.5	44.5
1878.							
January	54.1	48.6	62.6	53.6	72	37	35
February	54.6	48.7	61.7	71.6	71	41	30
March	55.8	48.9	63.3	55.8	76	41	35
April	58	51.8	64.6	57.1	80	41.5	38.5
May	62	55.9	69.9	60.6	89	47	42
June	72	59.5	72.7	62.8	81	47	34
Annual mean	62.4	55.4	70.3	63.6	82	46	37

It will be observed that in the average of the year it rains about one day in the week; not all day, however. The most days in any one month was just half the days in February, 1878. That was a very wet month and touched the idea prevalent of six months of our year. But the table shows that the average for the rainy six months is forty-two days, and many of these days are only showery.

Messrs. Woodhead & Gay, fruit dealers, prepared for Mr. Graham the following table, showing the times during the year when the various fruits are ripe and in market in Los Angeles.

Oranges	Christmas to July.
Lemons	All the year.
Limes	All the year.
Apples	July to November.
Pears	July to November.
Grapes	July 15 to December.
Raisins	October 20 (new).
Peaches	June 15 to Christmas.
Apricots	June 15 to September.
Plums and prunes	June 1 to November.
Cherries	June.
Japanese persimmons	November.
Guavas	Nearly all the year.
Loquats	May 15 to June 15.
Strawberries	Nearly all the year round.
Raspberries	June 15 to September.
Blackberries	June 15 to September.
Currants	May 15 to June 15.
Gooseberries	June.
Watermelons	July to October.
Muskmelons	July to October.

Los Angeles is fourteen miles from the Pacific, and is accessible by five railroads.

INFECTED VESSELS AT NEW YORK QUARANTINE.

Dr. W. M. Smith, health officer, under date of August 13, gives the following account of infected vessels arriving at his station:

The schooner *Augustus J. Fabens* arrived at this port from Port-de-Paix the 6th instant with a cargo of logwood.

The captain, mate, and steward were sick on arrival, and were sent to hospital on the 7th. Two seamen were sent to hospital from the same schooner, all sick with the malarial fever common to ports in Hayti. These, and indeed most other cases on the vessels laden with logwood, have assumed a typho-malarial type, those on the Austrian bark *Treci Dubrovacki* most notably. This bark took a cargo of logwood at Port-de-Paix, Hayti, leaving there June 6. One man was taken sick on the day of departure, and died June 10, at which date five others were taken sick. June 15 the captain was taken sick, and died June 23.

On arrival at this port, June 24, but one man and one boy of a crew of fifteen were able to do duty. Eleven men were removed to hospital, all of them very sick, one being in a comatose condition and another delirious; of the eleven, three died in hospital.

This vessel was in the foulest condition imaginable. The limited space on deck not occupied by logwood, as also the forecastle, was indescribably filthy.

On opening the hatches the offensive gases that issued from them were oppressive on every part of the vessel. This vessel was discharged in quarantine and thoroughly cleansed, when *pratique* was given, and she was allowed to load at the wharf.

Since my report of the cases occurring on the steamer *Colon*, two of a similar character have occurred on the steamship *Acapulco*, leaving Aspinwall June 16, arriving at this port June 24.

July 29, steamer *Niagara* arrived at this port five days from Havana.

After detention a few hours at the Lower Quarantine, for fumigation, &c., the vessel was sent to Upper Quarantine to dischage. The day following I found John McBride, a fireman, sick. He had evidently been ill two or three days, and avoided observation at the visit of the deputy to the steamer on the 29th. This man died of yellow fever August 1.

August 4, steamer *Saratoga* arrived at Lower Quarantine, having sailed from Havana the 31st of July. William McCologan, fireman, was taken sick with yellow fever. This man has been very sick—hemorrhage from the nose, ears, and bowels has been a marked feature in the case; he is now convalescent. On the 5th, Axel Abrahamsen, a steerage passenger, was taken sick with yellow fever, and sent to hospital, where he died on the 11th instant.

The *Saratoga*, discharged at Quarantine, in the Upper Bay, was thoroughly cleaned and disinfected, and on the 7th instant given *pratique*.

August 11, the steamer *City of Vera Cruz* entered Lower Quarantine from Vera Cruz July 29, via Havana August 7.

Arthur Liers, a steerage passenger, having yellow fever, was sent to hospital soon after the arrival of the steamer. He was taken sick on the 9th, complaining the first day only of supra-orbital headache. The symptoms of this case have been extremely unfavorable from the day of admittance to the hospital. Early in the day of his admission a few ounces of highly albuminous urine was passed; complete suppression of urine has existed since the afternoon of that day. At this date black vomit has been frequent for the past eighteen hours.

The *Vera Cruz* will discharge at Upper Quarantine her entire Havana cargo, and, after a satisfactory cleansing and disinfection, will be allowed to proceed to her wharf to discharge the cargo taken at Vera Cruz, which, it should be remarked, is stowed in the hold, the Havana cargo being between decks.

Careful observation of the history of these cases of yellow fever leads one to the following conclusions, to wit:

The case taken from the *Niagara*, the 30th instant, and the two removed from the *Saratoga* the 4th and 5th instant, if the history was correctly given, received the infection at Havana in the open bay; both the steamships named having taken their cargo by lighters, and neither of the cases referred to left the vessel while in the harbor of Havana.

Three directions are open to suspicion, either one of which may be the source of the infection: the cargo, the atmosphere of the bay, or the vessel itself. It is not my purpose to express an opinion as to which of these gave rise to the disease. The antecedent history of the case occurring on the *Vera Cruz* renders the source of the infection much less doubtful. This man was engaged as receiving clerk in the office of a gas company, doing business a short distance out of the city of Havana. On the day he left Havana he delivered some papers at No. 76 Cuba street, in that city, and then proceeded to the "Sugar Wharf," from which he was taken to the steamship.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to hav the white and colored populations given separately.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 14, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Bangor	17,000	5	13	39.9	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portland	34,000	7	19	28.7	3	.....	5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	2	7	26.1	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	2	4	12.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Mass .... Boston	375,000	101	206	28.7	27	1	84	5	.....	.....	.....	.....	7	4	1	.....	1	99	.....
Bridgewater	3,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge	50,400	11	19	20.8	2	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
Edgartown	1,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,000	7	16	30.9	2	.....	3	.....	2	.....	2	.....	.....	.....	.....	.....	.....	7	2
Newburyport	13,800	.....	3	11.2	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,476	2	4	27.8	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	1	2	27.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	2	4	28.3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	11	34	36.2	2	.....	.....	.....	.....	.....	.....	.....	3	2	.....	.....	.....	.....	.....
Lawrence	39,144	6	10	13.3	1	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lowell	59,338	24	43	37.5	6	.....	16	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Worcester	58,000	7	18	16.2	3	.....	8	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Lynn	38,000	11	21	28.8	4	.....	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Brockton	13,608	3	6	23.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	5	5	11.8	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	.....	4	19.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,600	1	1	4.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	6	9	18.7	1	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	6	.....
Springfield	33,000	5	11	17.1	1	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
R. I ..... Providence	104,862	18	42	20.8	5	.....	10	.....	2	.....	2	.....	1	.....	.....	.....	.....	14	1
Conn .... New Haven	63,000	7	12	10.0	.....	.....	3	.....	1	.....	.....	.....	2	.....	.....	.....	.....	4	.....
New Britain	14,000	3	5	18.6	1	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fairfield	3,748	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,209,561	301	627	27.0	101	13	145	16	5	9	8	.....	41	1	6	.....	7	220	19
Brooklyn	564,448	169	289	27.2	24	3	97	8	.....	4	2	.....	12	.....	2	.....	5	125	11
Yonkers	19,000	3	8	22.0	1	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Poughkeepsie	20,200	4	12	29.5	1	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburg	18,043	3	6	17.4	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utica	34,000	7	19	28.9	1	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....	.....
Rochester	90,000	20	47	27.0	3	2	12	1	2	1	.....	.....	.....	.....	.....	.....	.....	15	3
Buffalo	155,159	18	53	17.7	6	.....	9	1	1	2	2	.....	.....	.....	.....	.....	.....	16	1
Watertown	10,666	.....	3	14.6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	54	97	24.2	6	2	18	2	3	1	.....	.....	3	.....	4	.....	.....	31	4
Orange	13,230	6	7	27.6	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Plainfield	8,000	1	2	13.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden	41,747	10	17	21.2	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	3	.....	8	.....
Pa ..... Philadelphia	908,380	148	333	19.1	55	1	39	3	21	.....	4	.....	4	.....	.....	3	2	.....	.....
Pittsburgh	156,634	39	65	21.6	8	.....	13	6	.....	1	.....	.....	3	3	.....	.....	1	.....	9
Erie	28,565	5	9	16.4	2	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	1	5	.....
Md ..... Baltimore	393,796	80	158	20.9	29	1	31	9	6	3	12	.....	3	1	.....	.....	4	63	.....
District of Columbia	170,000	34	77	23.6	13	2	10	1	3	.....	1	.....	6	.....	.....	.....	.....	22	1
Va ..... Norfolk	26,200	5	11	21.6	1	.....	.....	2	1	1	.....	.....	1	.....	.....	.....	.....	4	1
Richmond	64,650	23	39	31.4	5	.....	2	.....	1	1	.....	.....	.....	.....	1	.....	4	5	2
Lynchburg	21,000	5	5	12.3	.....	1	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	2	7	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
S. C ..... Charleston	57,000	12	34	31.1	4	.....	5	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	3	8	15.7	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Atlanta	38,000	8	14	19.2	2	.....	7	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Savannah	33,248	.....	20	31.4	3	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rome	5,000	.....	2	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick	2,900	1	1	18.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	1	4	20.8	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	10	19	24.8	3	.....	.....	.....	.....	3	.....	.....	1	.....	.....	.....	.....	3	.....
Selma	7,505	7	7	48.7	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss .... Columbus	5,747	.....	1	9.1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,000	24	72	17.4	11	.....	5	2	1	8	2	.....	4	.....	.....	.....	.....	5	3
Shreveport	8,033	1	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morgan City	2,018	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	20,597	5	6	15.2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austin	16,000	.....	2	6.6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	1	7	16.6	.....	.....	4	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	13	28	33.5	2	.....	5	.....	1	.....	.....	.....	2	.....	.....	.....	2	9	.....
Clarksville	7,250	.....	2	14.8	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,800	2	4	54.8	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	22	52	15.5	10	.....	9	.....	.....	.....	2	.....	4	.....	.....	.....	.....	9	2
Ohio .... Cincinnati	280,000	47	119	22.1	16	.....	18	1	.....	.....	.....	.....	8	2	1	.....	1	41	3
Cleveland	175,000	.....	80	23.8	5	.....	20	1	2	.....	6	.....	2	.....	.....	.....	1	.....	3
Gallipolis	5,500	.....	2	18.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Dayton	39,000	7	19	25.4	2	.....	4	.....	1	.....	.....	.....	.....	.....	1	.....	.....	5	1
Portsmouth	2,320	.....	4	90.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	12	30	20.2	1	.....	2	.....	1	.....	1	.....	2	.....	.....	.....	1	6	2
Evansville	30,000	4	13	22.5	2	.....	4	.....	.....	6	.....	.....	.....	.....	.....	.....	1	.....	.....
Richmond	13,000	2	4	16.1	2	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,298	130	222	22.8	13	2	70	7	2	1	5	.....	15	1	4	1	1	96	10
Aurora	12,059	2	6	26.1	2	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	4	.....
Peoria	34,275	1	3	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	2	5	17.5	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Elgin	8,770	2	2	11.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	127,000	37	54	22.2	2	.....	12	2	.....	.....	1	.....	2	.....	.....	.....	.....	16	.....
Minn .... Saint Paul	41,800	6	14	17.3	.....	.....	7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mich ... East Saginaw	19,000	5	9	24.7	.....	1	3	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Flint	9,000	3	4	23.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Iowa .... Dubuque	23,000	.....	5	11.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	15,800	.....	4	13.2	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Mo ..... Saint Louis	500,000	71	130	13.6	13	.....	34	.....	4	6	.....	.....	4	.....	.....	.....	2	56	10
Nebr .... Omaha	30,652	.....	19	33.0	.....	.....	9	2	2	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	5	7	14.6	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 14, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Cal ..... San Francisco	233,700	28	88	19.6	13	.....	7	.....	2	2	.....	.....	4	.....	.....	.....	2	11	4
Sacramento	21,500	1	6	14.5	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....	2
Los Angeles	11,000	.....	1	4.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	3	22.3	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	1	.....
Totals	8,298,453	1,660	3,546	22.3	440	29	801	80	87	56	55	.....	146	14	23	7	42	930	98

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING AUGUST 14, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	202	4	28.5	41.7
R. I .....Providence	100,862	4,000	42	.....	21.7	.....
Md .....Baltimore	338,384	55,712	124	34	19.1	32.1
District of Columbia	114,000	56,000	30	47	13.7	43.6
Va.....Norfolk	14,900	11,300	5	6	17.5	27.7
Richmond	37,953	26,699	17	22	18.9	43.2
Lynchburg	10,000	11,000	5	5	26.1	23.7
N. C .....Wilmington	6,714	10,286	3	4	23.3	20.3
S. C.....Charleston	25,000	32,000	11	23	22.8	37.4
Ga .....Savannah	18,229	15,019	5	15	14.2	51.9
Augusta	16,182	10,830	3	5	9.7	23.4
Atlanta	22,000	16,000	8	6	19.0	19.6
Ala .....Mobile	28,000	12,000	10	9	18.6	39.2
Selma	3,425	4,080	2	5	30.5	63.9
Fla .....Jacksonville	6,000	4,000	.....	4	.....	52.2
Miss.....Columbus	2,900	2,847	.....	1	.....	18.3
La .....New Orleans	159,728	57,231	47	25	15.4	22.8
Shreveport	3,916	4,117	1	1	13.3	12.7
Tex.....Austin	12,000	4,000	1	1	4.3	13.0
Tenn ....Nashville	27,874	15,069	14	14	25.6	46.2
Clarksville	4,000	3,250	2	.....	26.0	.....
Ky .....Louisville	153,125	21,875	39	13	13.3	31.9
Totals	1,474,592	382,615	571	244	20.2	33.2

REPORTS FROM PLACES IN WHICH BURIAL PERMITS ARE NOT REQUIRED FOR WEEK ENDING AUGUST 14, 1880.

Alexandria, Va., 13,000; deaths, 12; under 5 years, 6; consumption 3, croup 2, diphtheria 2. Allegheny, Pa., 78,000; deaths, 17; under 5 years, 4; consumption 1, diarrhœa 2, diphtheria 1, enteric fever 2, pneumonia 1, puerperal 2. Bath, Me., 8,000; deaths, 5; under 5 years 2; consumption 2, diarrhœa 3. Boulder, Colo., 3,030; one death, old age. Brattleborough, Vt., 6,000; diarrhœa 1, under 5 years. Calais, Me., 6,170; deaths, 2; enteric fever 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 5; under 5 years, 1; consumption 2, diarrhœa 2. Circleville, Ohio, 6,400; deaths, 2; malarial fever 1, old age 1. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; no deaths. Cumberland, Md., 12,000; deaths, 1. Dallas, Tex., 10,300; pneumonia 1. Davenport, Iowa, 23,000; deaths, 12; under 5 years, 7; diarrhœa 3, diphtheria 2, malarial fever 1, scarlet fever 2. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Gun City, Mo., 125; no deaths. Helena, Mont., 3,630; whooping cough 1, under 5 years. Hernando, Miss., 1,000; no deaths. Huntingdon, Pa., 4,500; consumption 1. Huntingdon, Tenn., 1,200; one death. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; no deaths. Kenosha, Wis., 5,000; no deaths. Key West, Fla., 1,200; deaths, 4; under 5 years 4; consumption 1, diarrhœa 2, enteric fever 1. La Salle, Ill., 10,000; one death; under 5 years. Lebanon, Pa., 9,000; deaths, 5; under 5 years, 3; diarrhœa 1, enteric fever 3. Madison, Ind., 9,009; deaths, 9; under 5 years, 8; croup 1, diphtheria 1, scarlet fever 6. Meridian, Miss., 4,013; one death; under 5 years. Milledgeville, Ga., 3,000; deaths, 2; diarrhœa 1, pneumonia 1. Monmouth, Ill., 6,000; pneumonia 1; under 5 years. Mount Pleasant, Iowa., 4,500; deaths, 2; under 5 years 1; enteric fever 1. Muscatine, Iowa, 8,412; deaths, 3; under 5 years, 1; diarrhœa 1, scarlet fever 1. Natchez, Miss., 7,000; enteric fever 1. Niles, Mich., 4,200; no deaths. Ocala, Fla., 1,000; no deaths. Okolona, Miss., 2,000; no deaths. Oshkosh, Wis., 17,030; deaths, 8; under 5 years, 2; consumption 1, diarrhœa 5. Painesville, Ohio, 5,000; no deaths. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; consumption 1. Pleasant Hill, Miss., 253; no deaths. Port Royal, S. C., 750; dipththeria 1. Rock Island, Ill., 12,000; deaths, 6; under 5 years, 4; consumption 1, diarrhœa 2, scarlet fever 1, pneumonia 1. Rockland, Me., 7,500; deaths, 4; under 5 years 1, consumption 2, measles 1, old age 1. Springfield, Ohio, 21,000; two deaths. Steubenville, Ohio, 13,500; deaths, 4; under 5 years 2. Summit, Miss., 1,804; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths 5; under 5 years, 2; consumption 1, croup 1, old age 1. Verona, Miss., 1,000; malarial fever 1. Waxahachie, Texas, 2,000; deaths, 6; diarrhœa 2, malarial fever 2, whooping-cough 2. Wesson, Miss., 2,000; diarrhœa 1, under 5 years. Winchester, Va., 5,000; consumption, 1. Winona, Minn., 10,000; deaths 4; under 5 years, 2; croup 1, diarrhœa 1. Youngstown, Ohio, 15,089; deaths, 4; under 5 years, 3; diarrhœa 2, pneumonia 1. Total population, 406,783; deaths under 5 years, 59; total number of deaths, 139; annual death rate 17.8 per 1,000.

INSPECTORS' REPORTS.

BAY ST. LOUIS, HANCOCK CO., MISS.—Inspector E. Latham writes under date of August 18, that the schooner Theresa G., of Shieldsboro, arrived that morning from Havana, having left that port on the 14th. She was boarded, and no one found sick, but the vessel having entered Mississippi Sound through Cat Island Pass, to the westward of Ship Island, she was sent back to the quarantine station at Ship Island for fumigation. Two schooners, the Mary A. Rushing and the Henrietta Esch, from Tuxpan, Mexico, have passed through the sound near Bay St. Louis, for New Orleans, via the Rigolettes, within the past three weeks.

A dispatch from Havana to the National Board of Health, dated August 16, had previously given notice of the sailing of the schooner Theresa G., on the 14th, for Shieldsboro, Miss., and also that there was one case of yellow fever on board, which died August 16.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	93				7																1	2			3						1									10	11	1	95
Albany Hospital	Albany, N. Y	do	125	47		1		2																				1															12	10	1	48
Emigrant Hospital	New York, N. Y	do	462	38	1		1	9					3	3		11					2	3		14	1	1		1											2					7	7	1	37
German Hospital	do	do	90	71		1	1							2							1	1																					10	19	1	67
Hart's Island Hospital	Hart's Island, N. Y	do	300	241																																							8	21		228
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	7																					1			2					1												7
Rochester City Hospital	Rochester, N. Y	do	125	60				1																																			6	3		63
Saint Mary's Hospital	do	do	320	224										1				1			1			1																			3	4	3	220
Saint Barnabas Hospital	Newark, N. J	do	45	27				3																	1	2		2															1	2		27
Saint Michael's Hospital	do	do	140	140	1	1		11					1	1	1	2					1			3	8	5		19							1							23	20	2	141
Memorial Hospital	Orange, N. J	do	13	10				3																		1																	3	2		11
Germantown Hospital	Germantown, Pa	do	25	17		1															1	1																					1	2		16
Jewish Hospital	Philadelphia, Pa	do	40	27																	2				2	1																	5	7		25
Saint Mary's Hospital	do	do	80	20	2			6					2		1	6					1	1	1	6	1			2						1									7	2	2	23
Homeopathic Hospital	Pittsburgh, Pa	do	40	18																	1											1											7	5		20
Saint Franciscus Hospital	Pittsburgh, Pa	do	125	64	2		1							1																													7	2	1	68
Freedmen's Hospital	Washington, D. C	do	300	242	1		1											1			1																						20	17	2	243
Providence Hospital	Washington, D. C	do	160	120	2			23						1											2	6		3															19	26		113
Georgia Infirmary	Savannah, Ga	do	50	35				1																	2	1		3															6	1	1	39
Saint Mary's Hospital	Galveston, Tex	do	300	87	1			8					1	1		1									6	7		10					1	1		2			1	1			14	10		89
Cincinnati Hospital	Cincinnati, Ohio	do	500	295	5	2	1	3					4	2	1	8					5		14	3	1			8							2	2		2					75	65	8	299
Saint Luke's Hospital	Detroit, Mich	do	25	11																																									1	10
City Hospital	Saint Louis, Mo	do	411	248	8	2	1	22					9	6	1	25						2		16	21		32					1	2		2							75	81	9	233
Saint John's Hospital	do	do	75	19	2			2					1			3						1						1															3			22
Saint Louis Hospital	do	do	250	71				5								8								6	10		20																16	16		76
German Hospital	San Francisco, Cal	do	150	58				3					2		1								3	1	1		1								1								9	8	1	58
Naval Hospital	Chelsea, Mass	do	100	25																			1				1			1	2		3									1	2		25
Do	Brooklyn, N. Y	do	115	34	1			4								3											1						2									1			36
Do	Washington, D. C	do	50	9				1																	1																	2	1		10
Do	Pensacola, Fla	do	20	1																																									1
Do	Mare Island, Cal	do	77	25				2																																						2
Alexian Brothers Hospital	Chicago, Ill	do	70	64	1	1		7																	2			7						2									14	7	4	67
Riverside Hospital	New York, N. Y	Contagious diseases	150	3																										1												1			3
Municipal Hospital	Philadelphia, Pa	do	180	11																																							10	3	1	17
State Hospital for Women and Children	do	Women and children	18	18																																							3	4		17
Children's Hospital	Washington, D. C	Children	72	40																																							4	5		39
Women's Hospital of Illinois	Chicago, Ill	Women	19	8																																							2			10
Insane Hospital	Augusta, Me	Insane	400	422																																							2	3		421
New Hampshire Asylum for Insane	Concord, N. H	do	300	290																																							2	2	1	289
Lunatic Hospital	Boston, Mass	do	200	162																																							4			166
State Lunatic Hospital	Worcester, Mass	do	650	521																																							23	1		543
Retreat for Insane	Hartford, Conn	do	150	140																																							6	2		144
Hospital for Insane	Middletown, Conn	do	515	519																																							4	3	2	518
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1258	1283																																							7	11	1	1278
Hudson River State Hospital	Poughkeepsie, N. Y	do	243	245																																							2	1	3	243
Willard Asylum	Willard, N. Y	do	1504	1604			1							2																													2		3	1603
State Hospital for Insane	Danville, Pa	do	760	473																																							6	1	1	477
West'n Pennsylvania Hosp'l for Insane	Dixmont, Pa	do	579	586																																							8	4	1	589
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	387																																							3	15	1	374
Eastern Lunatic Asylum	Williamsburg, Va	do	330	328																																							5	1		332
North Carolina Insane Asylum	Raleigh, N. C	do	283	278																																							1	2		277
Alabama Insane Asylum	Tuscaloosa, Ala	do	406	409																																							4	1		412
State Lunatic Asylum	Austin, Tex	do	359	357																																							2			359
Longview Asylum	Carthage, Ohio	do	670	674			1																																				1	1	1	673
Michigan Asylum	Kalamazoo, Mich	do	660	656																																							2	6		652
Minnesota Hospital for Insane	Saint Peter, Minn	do	668	....																																							5	7		666
Insane Asylum	Saint Louis, Mo	do	329	339																																							2	3		338
Insane Asylum of California	Stockton, Cal	do	1117	1114																																							2	2	1	1113

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Aug. 7	2	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Prince Edward Isl'd	Charlottetown	12,000	Aug. 7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.2
Canada	Montreal	135,000	Aug. 14	87	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	6	70.5
Bermuda	Hamilton	14,867	Aug. 10	8	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	83
Do	....do	14,867	Aug. 17	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Cuba	Havana	195,437	Aug. 7	229	61.1	.....	.....	.....	41	.....	3	.....	3	.....	.....	.....	.....	84
Bahamas	Nassau, N. P	13,000	July 17	6	24.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	6	88
Do	....do	13,000	July 24	2	8.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	2	89
Do	....do	13,000	July 31	4	16.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	4	86
Do	....do	13,000	Aug. 7	1	4.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	1	84
St. Domingo	San Domingo	8,000	July 4	5	32.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	....do	8,000	July 11	7	45.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	....do	8,000	July 18	7	45.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	....do	8,000	July 25	6	37.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	....do	8,000	Aug. 1	6	37.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Mexico	Matamoros	16,000	Aug. 7	13	42.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Do	Acapulco	3,500	Aug. 24	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	....do	3,500	Aug. 31	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Azores	Fayal, Horta	7,630	July 10	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Do	....do	7,630	July 17	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Ireland	Queenstown	10,000	Aug. 7	6	31.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Aug. 7	77	.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	1	57.8
Scotland	Dundee	155,100	July 31	52	17.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	7	58.1
Do	Leith	58,479	Aug. 7	23	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	11	59.2
England	London	3,664,149	July 31	1,746	24.9	.....	.....	.....	.....	.....	4	.....	14	.....	.....	.....	111	.....
Do	Sheffield	304,938	July 31	88	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58.4
Do	....do	304,938	Aug. 7	133	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
Do	Tunstall	180,093	July 31	89	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
Do	Liverpool	544,056	Aug. 7	273	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	23	61
Do	Leeds	.....	July 31	137	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	59
Wales	Cardiff	82,364	Aug. 7	22	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	3	62
France	Paris	1,988,806	July 29	1,101	28.8	.....	.....	.....	.....	.....	50	.....	31	.....	.....	.....	116	.....
Do	Lyons	342,815	July 24	222	33.8	.....	.....	.....	.....	.....	17	.....	3	.....	.....	.....	10	.....
Do	Rouen	104,902	Aug. 7	76	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	July 31	154	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	1	.....	2	63
Do	Rotterdam	150,378	Aug. 7	85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Switzerland	Geneva	52,077	July 17	12	12.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	52,077	July 24	6	6.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	52,077	July 31	8	8.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Zurich	22,103	July 31	7	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Belgium	Antwerp	173,643	July 31	120	.....	.....	.....	.....	.....	.....	21	.....	1	.....	.....	.....	.....	.....
Do	....do	173,643	Aug. 7	110	.....	.....	.....	.....	.....	.....	15	.....	2	.....	.....	.....	.....	.....
Germany	Berlin	1,096,644	July 24	933	44.2	.....	.....	.....	.....	.....	.....	34	10	1	.....	127	62	65
Do	Hamburg	400,000	July 17	215	28.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	8	.....
Do	Breslau	276,000	July 24	272	51.3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	79	65
Do	Barmen	95,000	July 31	52	28.5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	65
Do	Bremen	109,000	July 24	40	19.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Cologne	141,639	July 31	99	36.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	17	.....
Do	....do	141,639	Aug. 7	88	32.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60	.....
Do	Frankfort-on-Main	128,000	July 31	63	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
Saxony	Dresden	220,500	July 24	135	31.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	17	64
Do	....do	220,500	July 31	124	29.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	9	65
Do	Chemnitz	91,806	July 17	69	39.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	73
Do	....do	91,806	July 24	87	49.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	80
Denmark	Copenhagen	235,254	July 27	128	28.4	.....	.....	.....	.....	1	.....	9	1	.....	.....	12	1	61
Italy	Rome	303,383	June 12	154	26.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Genoa	180,000	Aug. 7	92	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austria	Trieste	128,233	July 17	112	45.6	.....	.....	.....	.....	.....	6	.....	3	.....	.....	.....	.....	.....
Do	....do	128,233	July 24	91	37.0	.....	.....	.....	.....	.....	4	.....	1	.....	.....	.....	.....	.....
Do	Vienna	746,243	July 31	326	19.9	.....	.....	.....	.....	.....	12	.....	5	.....	.....	.....	.....	.....
Hungary	Buda-Pesth	344,604	July 24	277	41.9	.....	.....	.....	.....	.....	5	.....	5	.....	.....	.....	.....	.....
Russian Poland	Warsaw	357,169	July 24	281	41.1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Sweden	Stockholm	169,429	July 24	97	30.9	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
Norway	Christiania	116,801	July 31	54	24.9	.....	.....	.....	.....	7	2	1	1	.....	.....	.....	.....	.....
Spain	Cadiz	65,028	July 31	53	42.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Carthagena	76,000	Aug. 1	56	37.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Seville	138,000	July 11	116	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Do	....do	138,000	July 18	142	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....
Do	....do	138,000	July 25	137	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
Do	....do	138,000	Aug. 1	174	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
Africa	Cape Town	85,000	July 19	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
India	Bombay	644,405	July 6	351	28.4	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....
Do	Calcutta	429,535	July 3	154	18.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

National Board of Health

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ESSENTIAL ELEMENTS OF REGISTRATION.

Dr. E. Harris, secretary of the New York State board of health, and superintendent of the bureau of vital statistics, publishes the following as a concise statement of the elements of registration which are essential and obligatory:

Requirements for a perfect registry of a death, a birth, or a marriage should be clearly understood by all persons who have anything to do in making up the records which are registered as vital statistics; and it is desirable that no more should be asked for and entered in the public registers of birth, marriage, and death than is necessary for making the record so complete that each of the registered events (whether of birth, marriage, or death) shall correctly identify the individual and the essential facts in the record. While each of these three epochs in a human life should be so registered as to protect the rights of a personal and family record of each individual, the comparison of any two, or the three, of these separate but corresponding parts of the vital registry should completely verify each other in certain essential particulars, and with unfailing certainty identify the individual, the family, and the civil estate or social condition of the person. This may be best explained by viewing at one glance all the essential points in the public registration of a birth, a marriage, and a death. These few points, being *essential*, are justly regarded as *obligatory* in the certificates and returns that are registered in the bureau of vital statistics.

	Birth.	Marriage.	Death.
1	Name and date:	Names and date:	Name and date: .....
2	Birthplace and residence (of parents):	Birthplace, residence (and place):	Birthplace, residence, (and place): .....
3	Names and birthplaces of parents:	Names and birthplaces of parents:	Names and birthplaces of parents: .....
4	Sex, and race other than the white:	Other race than the white:	Sex, and other race than the white: .....
5	Paternal occupation:	Occupations:	Occupation (paternal, if an infant): .....
6	Parents' ages:	Ages:	Age: .....
7	Child's number in this family: —— by this mother?	Social estate ("état civil"):	Social estate ("état civil"): .....
8	Attestation of the event and its record:	Attestation of the event and its record:	Attestation of the event, its causes and the record: .....

Under the eight heads, as given in this view of the scheme of public registry, we arrange all parts of the record necessary for complete *identification* of the individual and the family. At the same time the full statements under these heads will supply the information which constitutes the science of vital statistics. All *forms of certificates* and all *methods* of returns and registry in the State system of vital statistics should be simple and comparable.

The report of the second year's work of the Sanitary Protection Association of Newport, R. I., is forwarded by Col. George E. Waring. A meeting was held July 27 and officers elected. The report condenses into two pages many valuable observations and suggestions concerning the sanitary conditions of cities and buildings, and the causes of defects in the latter.

SEMI-ANNUAL REVIEW OF THE MORTALITY IN PROVIDENCE, R. I., JANUARY–JUNE, 1880.

[By EDWIN M. SNOW, M. D., Superintendent of Health.]

The city of Providence has a location naturally healthy. The surface is quite uneven and the surface-drainage is excellent; natural water-courses opening into the bay give a free circulation of air into every part of the city. The population is not crowded, but generally the dwelling-houses are single and with unoccupied space about them. There is no underground population, and there are no large tenement houses. The population by the census of the present year is 104,862.

During the first six months of the year 1880 there were 1,094 deaths in Providence. Double this number, and it would give 2,188 as the mortality for the year. This would represent an annual rate of mortality of 20.86 in each 1,000 of the population, which is a slightly greater rate than the average for a series of years. It should, however, be remembered that in a long series of years, as shown by statistics in Providence, only 45.68 per cent. of the annual deaths occur in the first six months of the year. We may, therefore, conclude that the annual rate of mortality, as represented by the deaths in the first six months of the present year, is less than the actual rate will be for the year.

Sex.—Among the 1,094 decedents in the first six months of the present year were 524 males, 570 females, or 47.90 males and 52.10 females in each 100 decedents. This proportion of females is greater than the average among the decedents, as well as among the living population in Providence, as appears by the following figures:

Decedents, 1880, 47.90 males, 52.10 females in each 100; decedents, 24 years, 49.02 males, 50.98 females in each 100; population, 1875, 48.37 males, 51.63 females in each 100.

Color.—Of the 1,094 decedents in Providence from January to June, 1880, there were only 45 colored persons, a much less proportion of colored than the average.

Parentage—According to parentage, the 1,094 decedents in Providence during the first six months of 1880 were divided as follows: American parentage, 492, or 44.97 per cent.; Irish parentage, 419, or 38.30 per cent.; English and Scotch parentage, 105, or 9.60 per cent; German parentage, 21, or 1.92 per cent.; Other foreign parentage, 57, or 5.21 per cent.

By the census of 1875, the living population of Providence was 47 per cent. of American parentage and 53 per cent. of foreign parentage. This shows that the mortality is greater among the foreign than among the American population.

Locality.—The rate of mortality differs greatly in different portions of the city of Providence. Thus, during the first six months of the present year, the extremes of mortality were one death in 77.4 of the population in the tenth ward, and one death in 147.1 of the population in the second ward. Or, reducing the figures to the annual rate, the annual rate of mortality in ward ten was 25.83 in each 1,000 of the population, and only 13.59 in ward two.

This enormous difference in the rate of mortality does not, however, indicate any such difference in the natural healthfulness of the two portions of the city. It indicates rather the difference in the population of the two wards. In ward two the population is mostly American, living in dwellings comparatively favorable to health, and having a very small proportion of children. In ward ten the population is mostly foreign, and with a large number of children. Hence the relative difference in the mortality of the two sections.

Age of decedents.—Of the 1,094 decedents in Providence, in the first half of the present year, 362, or 33.0 per cent. of all, were under 5 years of age; 141, or 12.8 per cent., were between 5 and 20 years; 276, or 25.2 per cent., were between 20 and 50 years; and 315, or 28.5 per cent., were 50 years or over.

These proportions are somewhat different from those of the aggregate mortality for a series of years. In the total of decedents in Providence, for 23 years, the percentages were: Under 5 years, 37.9 per cent.; 5 to 20 years, 10.4 per cent.; 20 to 50 years, 26.9 per cent.; and 50 years and over, 24.7 per cent.

Causes of death.—Of the 1,094 deaths from January to June, 1880, there were 33 from accidental causes; 102 from diseases of the brain, including also apoplexy, paralysis, and convulsions; 34 from cancer; 26 from diarrhœal diseases, including enteritis; 152 from consumption; and 170 from tubercular diseases, including consumption, hydrocephalus, and tuberculosis; 171 from acute lung diseases, including pneumonia, congestion of the lungs, and bronchitis; 23 from fevers,

mostly typhoid; 30 from diphtheria: 59 from diseases of the heart; 18 from child-birth and puerperal diseases; 19 from diseases of the kidneys; 10 from diseases of the liver; 9 from croup; and 191 from scarlatina.

The specially prominent feature of the mortality during the last six months is the large number of deaths from acute lung diseases, scarlatina, and tubercular diseases. These causes produced 532 deaths, or nearly one-half of the whole number.

The deaths from consumption and other tubercular diseases were slightly above the average, but are not supposed to be increased or diminished by season or by epidemic causes.

The deaths from acute lung diseases (pneumonia, congestion of the lungs, and bronchitis) were considerably above the average, and seemed to be, to some extent, epidemic. There was, on an average, more than one death daily from these causes during the months of March, April, and May.

Scarlatina was severely epidemic during the whole six months, causing 191 deaths during the time, or more than one death daily on an average. The epidemic of scarlatina began in August, 1879, and during the twelve months from August, 1879, to July, 1880, inclusive, there were 394 deaths from this disease, in Providence. This number is considerably greater than was ever before known in Providence from scarlatina in any consecutive twelve months; and *I think is a greater number than was ever known, in a similar period of time, from any disease.*

At the present time (August) the disease still continues, but with a greatly-diminished number of cases and of deaths. The epidemic can hardly be considered as at an end; but the disease will probably increase, to some extent, as the weather grows cooler. We may, however, confidently expect a much less number of deaths from the disease during the coming winter than during the last.

ABSTRACTS FROM CONSULAR REPORTS.

BOMBAY.—United States Consul B. F. Farnham reports for the week ending June 22, 4 deaths from smallpox and 18 from other contagious diseases. Total from all causes 344, and 20 still-births in a population of 644,400. This would make the annual death-rate over 27 per 1,000, but the population given being that of the census of 1872, and considerable increase having taken place since, the rate obtained is too high. Sanitary condition improving; malarial fevers are the prevailing diseases; mean temperature, 86°.

BRADFORD, ENGLAND.—United States Vice-Consul B. Richardson reports for the week ending July 31 a total of 59 deaths, being at an annual rate of 15.6 per 1,000. Among the causes of death were consumption, 12; acute lung diseases, 11; diarrhœa, 2; and scarlet fever, 1. There were 14 deaths under one year, 25 under 5 years, and 8 over 60 years of age. The number of births was 103, giving an annual rate of 27.2 per 1,000.

BUDA PESTH, HUNGARY.—Under date of August 3, United States Consul Henry Stern writes concerning a case of cholera reported July 24 in the Pesther Lloyd. The case occurred in Southern Hungary, at the village of Szouta, on the railroad between Szegedin and Essegg, and near the river Drau, a branch of the Danube. Later advices, through the paper above quoted, report that the case had been thoroughly investigated by the authorities, and proved to be a genuine case of Asiatic cholera. The Hungarian paper states that the victim of the disease was a laborer on the railroad, died after an illness of three days, and that a *post-mortem* examination was made by the medical officers of the government. They declared the disease Asiatic cholera, and ordered disinfection of the station, cars, &c. No history of the case is given.

CAYENNE, FRENCH GUIANA.—Under date of July 7, the United States consul states that yellow fever last appeared in Cayenne November, 1876, and prevailed mostly among the troops and convicts till the end of July, 1877. During this time there were 134 cases and 38 deaths. Since then there has been no contagious disease in Cayenne. The mortality is stated at from 4 to 5 per cent. (40 to 50 per 1,000 per annum), which is not considered high, in view of the number of convicts, and of people coming from the interior, which is very unhealthy. The population is estimated at 12,000, of whom about 8,000 are permanent residents. The prevailing diseases are malarial fevers and dropsy. Weekly mean of thermometer 79°.

CONSTANTINOPLE.—United States Consul G. H. Heap, under date of August 6, forwards a report from Dr. Matteosian, who had been requested to investigate a rumored outbreak of cholera in certain villages on the Bosphorus. The report states that the rumors were in part false and in part exaggerated, as no case of true Asiatic cholera has been observed. There is no epidemic, but cases of "summer cholera" have been frequent, with some cases of dysentery. But very few deaths have occurred, the total mortality being about the same as for the corresponding season of last year, which was considered quite healthy.

The bulletin of epizootic diseases reports good health prevailing among the domestic animals up to August 3.

HAVANA, CUBA.—During the week ending August 21 there were 40 deaths from yellow fever, most of them among civilians. The American schooner *Theresa G.*, which sailed for Shieldsborough, Miss., on the 14th, had yellow fever on board while discharging at a foul and infected wharf. After leaving the wharf the vessel was thoroughly disinfected and cleansed before sailing. One man who had been sent to hospital while the schooner was at the wharf has since died of yellow fever.

MALTA AND GOZO.—United States Consul C. B. Eynaud reports 207 deaths for the two weeks ending July 31. Of these, 3 were from typhoid and 3 from typhus fever. Population 153,500; annual death-rate 35.1 per 1,000. Excepting diarrhœa among children, the health of the islands is very good. Mean temperature 86°.

MELBOURNE, AUSTRALIA.—United States Consul O. M. Spencer forwards a report of mortality for the city and suburbs for the month of May. There was but 1 death from cholera; typhoid fever caused 21 deaths, and other contagious diseases 17. The total number of deaths was 391 in a total population of 265,000, or at the annual rate of 17.7 per 1,000. Mean temperature 53°.8.

SANTA CRUZ, PALMA, CANARIES.—United States Consul F. W. Lavers reports 13 deaths during the month of June, in a population of 6,070; annual death-rate 25.7 per 1,000. No causes of death noted.

SANTANDER, SPAIN.—The population of the province is estimated at 235,300. The deaths were 513 for the month, giving an annual rate of 26.1 per 1,000; births 581, annual rate 29.6 per 1,000. There were 182 deaths under 5 years and 130 over 60 years of age. Among the fatal diseases were: Small-pox 2, measles 3, scarlet fever 10, diphtheria and croup 3, whooping-cough 9, typhus fever 22, dysentery 11, diarrhœa 2, puerperal fever 5, consumption 47, acute lung diseases 36, diseases of the brain 9.

In June there were 460 births, annual rate 23 per 1,000; deaths 399, annual rate 20.3. Deaths under 5 years 147, over 60 years 148. Causes of death: Measles 2, scarlet fever 2, diphtheria and croup 16, whooping-cough 7, typhus fever 19, dysentery 11, diarrhœa 23, puerperal fever 3, consumption 40, acute lung diseases 39, diseases of the brain 20.

SINGAPORE.—During the month of May there were 316 deaths, of which "fever" caused 97, diarrhœal diseases 40, rheumatism 15, consumption 11, small-pox 1, and elephantiasis 3. General sanitary condition good, and no epidemic diseases noted at latest advices, July 12, 1880.

SYDNEY, AUSTRALIA.—Reports for the month of May record 334 births and 160 deaths in a population of 76,159 (census of 1871). Annual birth-rate, 52.6 per 1,000; death-rate, 25.2. Including the suburbs, the population is 136,483, in which there were 739 births and 333 deaths; annual birth-rate, 64.9; death-rate, 29.2 per 1,000. In Sydney the deaths under 5 years were 53, or 33 per cent. of all deaths. Among the causes of death were, croup, 2; typhoid fever, 2; dysentery, 3; diarrhœa, 5; dropsy, 5; cancer, 4; consumption, 17; diseases of the brain and nervous system, 22; of the heart, 5; of the lungs, 20; of the digestive organs, 15; of the kidneys, 7; violent deaths, 17.

VERA CRUZ, MEXICO.—United States Consul S. T. Trowbridge reports for the month of July 79 deaths in a population of 20,000, being at an annual rate of 47.4 per 1,000. One death from yellow fever is noted. Mean temperature 89°. Deaths from consumption 15, diarrhœa 15, acute lung diseases 9, malarial fevers 5, whooping-cough 2. Of the 79 decedents, 73 were Mexicans, 5 Spanish, and 1 French.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

DEPOSIT, BROOME COUNTY, N. Y.—Under date of August 21, Dr. Homer Law, United States Navy, writes that one death from "*cholera epidemica*" occurred in that village on the 20th; origin of the case unknown, and no other cases reported.

ERIE, Pa.—Dr. E. W. Germer, health officer, under date of August 22, writes to deny emphatically the report in papers of the 20th announcing the appearance of Asiatic cholera in Erie. It appears that a physician of the city reported two cases by that name, which cases are declared by other physicians to have been sporadic cholera or cholera morbus. Dr. Germer states that no true cholera has been known in Erie since 1854, and that the present excitement and alarm are entirely groundless.

ERIE, PA.—The report of the existence of Asiatic cholera in this city has been contradicted by the health officer, Dr. Germer. Further investigation by Dr. D. H. Strickland, of the United States Marine Hospital Service, confirms the report of Dr. Germer, that the fatal cases were not Asiatic cholera, and that this disease cannot originate in the city, nor is it likely to spread if introduced.

EVANSVILLE, IND.—Dr. H. G. Jones, health officer, writes, under date of August 23, that for three weeks past typhoid and typho-malarial fevers have prevailed, and are now declared epidemic by the city board of health. All practicing physicians are required to report cases. The sewer system of the city is extensive, but, owing to the long-continued dry weather, there has not been enough water to flush the sewers.

EVANSVILLE, IND., August 23.—Dr. J. W. Compton writes that the typhoid fever appeared early in July and has continued to increase in extent and malignancy, the usual diarrhœa of enteric fever terminating in many cases, in exhausting hemorrhages from the bowels. Opinions differ as to the cause. Some ascribe the disease to local unsanitary conditions, others to atmospheric influences only. The city has suffered greatly for want of rain, the fall for eight weeks past having been insufficient to wash the surface or to cleanse the sewers, which emit offensive gases from the untrapped inlets at each street-crossing. While no portion of the city is exempt from the fever, it is less frequent ata distance from the sewers; and at the almshouse, just outside of the city limits, no case has originated among about 100 inmates. The mortality has not been great, compared with the number of cases.

NEW YORK.—Dr. W. M. Smith gives the following account of sickness on board the steamer *Clyde*, which arrived at quarantine on the 19th of August:

One man had been taken sick and died at sea; four others had been sick but recovered, and a fireman, named Frederick Sharron, was still very ill on arrival. Of the fatal case a very imperfect history was obtained. The captain said that the man died of *delirium tremens*. The physician was reticent, but said he showed evidences of "fever." The history of those who recovered was almost as unsatisfactory; they were consul's men. One of them still showed decided yellowness of the skin and eyes. They said they were first taken with pain in the back and frontal headache; they had no chills. The case removed to hospital was in many respects similar to the cases occurring on the *Colon* and *Acapulco* of this line, previously reported—congestion of the sclerotic and of the eyelids, a marked hemorrhagic tendency, as shown by epistaxis and by "coffee-grounds" ejections from the stomach; tongue red on the tip and margin, with a brownish coating in the middle; urine scanty and slightly albuminous. I have seen no cases more characteristic of yellow fever than those we have had from the Aspinwall steamships, in which list I include the cases from the *Acapulco*, previously reported. An autopsy in the case of Arthur Lies, from the steamship *City of Vera Cruz*, reported as a case of yellow fever, gave the following results: *Kidneys*, not much congested; no interstitial nephritis; granular matter in the tubules of the cortex and pyramids. These granules consist chiefly of fat, albuminoid particles and epithelial *débris*. Some of the tubules contain this granular matter, while in places their own epithelium appears normal. A few hyaline casts are seen at the apex of the pyramids. *Liver:* superior surface has a yellowish tinge; inferior, a dark brown color; one section is found to contain fat and pigment. Fat is found mostly near the portal vein, while the pigment is distributed around the hepatic radicles. There is also dilatation of these central vessels, and atrophy of the cells around them. There is no interstitial lesion nor morbid congestion. *Spleen:* the organ is intensely congested, and in places the tissue is broken down by extravasation of blood; the spleen corpuscles appear normal.

SAVANNAH, GA.—Dr. J. T. McFarland, health officer, under date of August 21, writes at the request of the board of sanitary commissioners, to call the attention of the National Board of Health to the form used in the BULLETIN for reporting the death-rate of certain cities. The commissioners complain that the death-rate of the white and colored populations combined appears prominently in the table, for Savannah and other Southern cities, while the separate death-rates for the two races, as given in the subjoined note, are easily overlooked. The result is stated to be injurious to the sanitary reputation and to the material interests of such cities as have a large colored population, and a change in the form of recording the reports is requested.

It will be observed that this request has at once been met by substituting for the foot-note a supplementary table (No. 9 of the BULLETIN), which will clearly exhibit the relative populations, number of deaths, and rates of mortality, in all cities having a considerable colored population.

The causes assigned by Dr. McFarland for the high death-rate among the colored people generally, coincide with those given in the review for July (BULLETIN No. 9), and in previous monthly reviews. Overcrowding and bad condition of habitations, improvidence and inattention to hygienic rules, and failure to avail themselves of the medical service offered free by the city, are especially mentioned. In Savannah the hospital for indigent colored people is permitted to be a place of refuge for many who are not strictly patients, and medical attendance for the poor is liberally provided for by the city. Yet from July 18 to August 21, eighty-seven burial certificates were issued to persons dying without medical attendance. In such cases, the health officer investigates the case and gives the certificate.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 21, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Portland	34,000	7	21	32.2	6	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
N. H ..... Concord	14,000	1	2	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	100	188	26.1	17	.....	61	11	4	1	.....	.....	10	2	2	.....	1	85	4
Cambridge	50,400	16	31	32.3	5	.....	15	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	16	1
New Bedford	27,000	9	18	34.6	2	.....	7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	8	1
Newburyport	13,800	2	11	41.0	4	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	2	4	28.6	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	19	27	28.7	3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	1	3	21.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence	39,144	12	20	26.6	2	.....	6	1	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lowell	59,340	26	35	30.5	3	.....	15	.....	.....	.....	.....	.....	2	1	.....	.....	1	20	.....
Worcester	58,000	9	18	16.2	2	.....	5	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Lynn	38,400	14	20	27.2	2	.....	6	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,600	1	3	11.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,800	.....	3	15.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	1	3	14.2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,600	2	9	37.0	1	.....	2	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Somerville	25,000	2	7	14.6	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Springfield	33,000	1	15	23.2	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	6	4
Pittsfield	21,300	.....	3	7.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edgartown	1,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	.....	1	13.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I..... Providence	104,862	18	39	19.3	5	.....	10	1	.....	.....	3	.....	5	1	.....	.....	.....	15	2
Conn .... New Haven	63,000	4	15	12.5	1	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	3	.....
New Britain	14,000	1	5	18.6	2	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Waterbury	20,700	3	7	17.6	2	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....
Vt ..... Burlington	16,500	5	8	25.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3	.....
N. Y ..... New York	1,209,601	304	601	25.9	81	17	136	28	4	10	7	1	45	3	3	.....	8	246	18
Brooklyn	564,448	.....	168	15.8	38	7	78	10	.....	4	1	.....	25	1	2	.....	2	.....	.....
Yonkers	19,000	3	5	13.7	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Poughkeepsie	20,200	2	7	18.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Newburg	18,043	.....	3	8.7	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rochester	90,000	16	47	27.0	4	.....	5	1	2	.....	.....	.....	2	.....	1	.....	1	9	1
Buffalo	155,159	27	64	21.5	6	.....	16	4	1	1	.....	.....	.....	.....	.....	.....	.....	21	3
Dunkirk	8,000	.....	4	26.0	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Jervis	10,000	.....	2	10.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Little Falls	6,910	3	3	22.6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	47	90	22.4	12	1	18	3	3	.....	4	.....	4	.....	7	.....	.....	29	4
Orange	13,120	2	5	19.7	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Camden	35,000	9	29	43.2	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	9	.....	11	.....
Plainfield	8,000	2	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	908,380	153	334	19.1	32	7	.....	78	13	1	6	.....	8	.....	.....	3	1	.....	.....
Erie	28,565	4	11	20.0	1	.....	3	1	.....	1	.....	.....	.....	.....	.....	.....	.....	5	.....
Pittsburgh	156,634	32	53	17.6	5	.....	11	7	2	1	1	.....	2	.....	1	.....	3	13	2
Del ..... Wilmington	44,000	4	13	15.4	5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Md ..... Baltimore	393,796	75	137	18.1	17	.....	18	6	1	2	4	.....	6	.....	.....	.....	6	43	4
District of Columbia	170,000	39	71	21.7	8	2	7	2	2	4	4	.....	3	.....	.....	.....	.....	25	3
Va ..... Norfolk	26,200	10	15	29.4	.....	.....	5	1	.....	1	.....	.....	2	.....	.....	.....	.....	8	1
Richmond	66,670	11	32	25.0	.....	2	4	1	.....	1	.....	.....	1	.....	.....	.....	1	7	1
Lynchburg	21,000	3	5	12.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	3	7	20.4	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	10	24	22.0	6	.....	5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ga ..... Savannah	33,248	12	22	34.5	2	.....	3	1	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....
Augusta	27,012	4	9	17.3	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Atlanta	38,000	6	15	20.6	2	.....	7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick	2,900	1	2	36.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	6	15	19.5	1	.....	2	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	5	1
Selma	7,505	4	6	41.7	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Miss ..... Columbus	5,747	1	1	7.7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	30	107	25.8	18	.....	10	1	.....	7	1	.....	3	.....	2	.....	1	4	6
Tex ..... Austin	16,000	4	5	16.4	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Antonio	20,597	3	10	24.3	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Waco	7,000	.....	4	29.8	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	.....	7	16.6	1	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	9	20	23.9	2	1	1	.....	1	1	.....	.....	1	.....	.....	.....	1	5	.....
Memphis	33,662	7	22	34.1	3	.....	6	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Clarksville	7,250	3	5	37.0	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,800	.....	1	13.7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	21	45	13.4	6	.....	5	.....	2	.....	5	.....	3	.....	1	.....	1	16	.....
Ohio ..... Cincinnati	280,000	51	108	20.1	14	.....	20	.....	.....	1	4	.....	6	1	.....	.....	4	39	2
Cleveland	175,000	.....	68	20.2	6	.....	16	3	1	.....	6	.....	2	.....	1	.....	.....	.....	.....
Dayton	39,000	6	12	16.0	3	.....	2	.....	.....	.....	.....	.....	2	.....	1	.....	.....	2	.....
Gallipolis	5,500	.....	2	18.6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ind ..... Indianapolis	75,350	14	35	23.7	1	3	8	.....	2	1	.....	.....	.....	.....	.....	.....	3	14	2
Evansville	30,000	5	21	36.5	4	.....	3	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jeffersonville	9,542	2	4	21.8	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richmond	13,000	.....	2	8.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ill ..... Chicago	503,298	150	241	24.8	15	4	72	8	3	2	12	.....	19	4	2	.....	3	97	10
Aurora	12,059	4	7	30.4	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	1
Peoria	34,750	5	13	19.3	1	.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....	1	1	1
Jacksonville	15,000	.....	1	3.5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	1	5	29.7	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ... Milwaukee	116,000	35	52	21.3	2	1	9	1	.....	.....	1	.....	2	.....	.....	.....	.....	16	1
Minn ... Saint Paul	41,800	13	23	28.3	3	.....	7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Mich ... Lansing	10,000	2	5	26.0	.....	.....	1	.....	2	.....	.....	.....	.....	1	.....	.....	.....	2	.....
East Saginaw	19,000	5	6	16.4	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa ... Dubuque	23,150	.....	7	15.8	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	15,800	1	5	16.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo ..... Saint Louis	331,392	.....	160	25.1	11	.....	27	.....	3	10	1	.....	2	.....	.....	.....	1	50	9
Kans ... Lawrence	8,500	3	3	18.4	.....	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr ... Omaha	30,652	2	7	12.0	.....	.....	2	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Utah ... Salt Lake City	25,000	3	6	12.5	.....	.....	1	2	.....	.....	.....	.....	.....	.....	1	.....	.....	3	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 21, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Cal ..... San Francisco	233,700	37	82	18.2	11	1	7	1	2	2	.....	.....	2	1	.....	.....	.....	16	2
Sacramento	21,500	3	6	14.7	1	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	3	.....
Los Angeles	11,000	1	4	18.9	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	2	14.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Totals	8,188,414	1,469	3,263	20.8	403	46	690	180	66	73	66	1	172	16	26	12	43	856	97

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING AUGUST 21, 1880.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass ..... Boston	370,000	5,000	186	2	26.0	20.8
R. I ..... Providence	100,862	4,000	36	3	18.6	39.1
Del ..... Wilmington	38,000	6,000	10	3	13.7	26.0
Md ..... Baltimore	338,384	55,412	109	28	16.8	26.3
District of Columbia	114,000	56,000	38	33	17.4	30.9
Va ..... Norfolk	14,000	11,300	5	10	17.5	46.1
Richmond	39,971	26,699	14	18	18.3	35.1
Lynchburg	10,000	11,000	2	3	10.4	14.2
N. C ..... Wilmington	6,714	10,286	0	7	.....	35.5
S. C ..... Charleston	25,000	32,000	7	17	14.6	27.7
Ga ..... Savannah	18,229	15,019	5	17	14.3	59.0
Augusta	16,182	10,830	6	3	19.3	14.4
Atlanta	22,000	16,000	7	8	16.6	26.0
Ala ..... Mobile	28,000	12,000	4	11	7.4	47.8
Selma	3,425	4,080	2	4	30.2	52.0
Miss ..... Columbus	2,500	2,247	.....	1	.....	23.2
La ..... New Orleans	159,128	57,231	71	36	23.2	32.8
Tex ..... Austin	12,000	4,000	4	1	17.3	13.0
Tenn ..... Nashville	27,874	15,669	14	6	26.2	19.3
Clarksville	4,000	3,250	2	3	26.0	45.1
Ky ..... Louisville	153,125	21,875	32	13	10.9	31.0
Ill ..... Elgin	8,630	140	5	.....	30.2	.....
Iowa ..... Keokuk	15,000	800	4	1	13.9	65.6
Totals	1,527,924	380,838	563	228	19.2	21.1

The following reports for the week ending August 21 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 7; under 5 years, 2; consumption 3, diphtheria 2. Allegheny, Pa., 78,000; deaths, 13; under 5 years, 5; diarrhœa 3, enteric fever 3, scarlet fever 1, pneumonia 1, whooping-cough 1. Bath, Me., 8,000; diarrhœa 2. Battle Creek, Mich., 7,500; deaths 6; under 5 years 2; consumption 1, diarrhœa 1, enteric fever 1. Belfast, Me., 5,300; deaths, 4; consumption 1, old age 1. Boulder, Colo., 3,000; croup 1, under 5 years. Brattleborough, Vt., 6,000; deaths, 2; old age 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 2; under 5 years, 1; consumption 1. Circleville, Ohio, 6,400; deaths, 3; under 5 years, 2. Clinton, Mich., 1,200; no deaths. Corinth, Miss., 2,264; deaths, 2; consumption 1, diarrhœa 1. Cumberland, Md., 12,000; diarrhœa 1, under 5 years. Dallas, Tex., 10,300; deaths, 4; consumption 1; enteric fever 1; malarial fever 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Flint, Mich., 9,000; old age 1. Gun City, Mo., 125; no deaths. Helena, Mont., 3,630; no deaths. Hernando, Miss., 1,000; no deaths. Huntingdon, Pa., 4,500; no deaths. Huntingdon, Tenn., 1,200; no deaths. Indianola, Tex., 900; old age 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 2; puerperal 1. Kenosha, Wis., 5,000; deaths, 3; under 5 years, 1. Key West, Fla., 1,200; deaths, 8; under 5 years, 4; consumption 1, diarrhœa 2. La Salle, Ill., 10,000; one death. Lebanon, Pa., 9,000; deaths, 2; consumption 1, puerperal 1. McComb City, Miss., 2,000; no deaths. Madison, Ind., 9,009; deaths, 4; under 5 years, 3. Martinsburg, W. Va., 6,384; old age 1. Massillon, Ohio, 6,876; one death. Meridian, Miss., 4,013; deaths, 2, under 5 years; consumption 1, croup 1. Milledgeville, Ga., 3,000; one death, under 5 years. Monmouth, Ill., 6,000; deaths, 4; under 5 years, 3; consumption 1, diarrhœa 3. Mount Pleasant, Iowa, 4,500; one death. Muscatine, Iowa, 8,412; deaths, 2; under 5 years, 1; pneumonia 1. Natchez, Miss., 7,000; deaths, 5; under 5 years, 3; diarrhœa 1, scarlet fever 1, pneumonia 1. Niles, Mich., 4,200; no deaths. Painesville, Ohio, 5,500; deaths, 6, under 5 years; consumption 1, pneumonia 1, diarrhœa 1. Pass Christian, Miss., 4,000; diarrhœa 1. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 3; under 5 years, 2; diarrhœa 2, enteric fever 1. Pleasant Hill, Miss., 253; no deaths. Port Royal, S. C., 750; diphtheria 1. Portsmouth, Ohio, 2,320; deaths, 4; under 5 years, 1; consumption 1, diarrhœa 1, enteric fever 1. Rensselaer, Ind., 900; diarrhœa 1. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., 12,000; deaths, 4; under 5 years, 2; diarrhœa 2, malarial fever 1, old age 1. Rockland, Me., 7,500; deaths, 5; under 5 years 1, consumption 2, diarrhœa 1, old age 1. Springfield, Ohio, 21,000; deaths, 4; under 5 years, 2; scarlet fever 1, puerperal fever 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 4. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 3; old age 1. Waxahachie, Texas, 2,000; no deaths. Winchester, Va ,5,000; no deaths. Winona, Minn., 10,000; diarrhœa 2, under 5 years. Youngstown, Ohio, 15,089; deaths, 3, under 5 years; diarrhœa 2, pneumonia 1. Total population, 396,878; deaths under 5 years, 51; total number of deaths, 127; annual rate per 1,000, 16.7.

DUBLIN, IRELAND.—The report of the medical officer of health shows an average death-rate of 33.4 per 1,000 per annum. On the northern side of the city the rate was 36.9, and on the south side only 31.3 per 1,000. Smallpox caused 45 deaths; whooping-cough, 37; measles, 26; scarlet fever, 43; fevers, 27; diarrhœa, 16; diphtheria 1, and all other zymotics 35, making a total of 230 from zymotic diseases. In the hospitals 337 patients were admitted with the following diseases: Smallpox, 156; typhus fever, 45; typhoid fever, 25; scarlet fever, 82; measles, 29. Measles has been epidemic in Dublin for a long time, and measures of prevention have been used with good effect. Inspection of houses reported as unhealthy, and improvement in their condition and construction, has been attended with much benefit to public health.

HAVANA, CUBA.—Advices of August 18 state that the British bark R. W. Wood, on which yellow fever appeared while on the voyage to Mobile, entered the port of Havana June 19, and went to a wharf of the Regla sugar storehouse, on the opposite side of the bay from Havana, to discharge cargo. From this point there is frequent and easy communication by steam ferry with the city. The vessel was there during her whole stay of twenty-two days, and was towed from that place directly to sea July 13. On the 8th of July the captain stated that his vessel was discharged, and he hoped to sail on the 10th. He was advised to have his vessel thoroughly cleansed, and she was fumigated July 9, with the understanding that she was to sail the next day. Fifty pounds of the sulphate of iron were also furnished, with instructions for its use in the bilge, &c. The vessel was detained four days after the fumigation, and it is said that the captain never slept on board during that time. The vessel lying at the wharf, the crew had ample facilities for visiting the city, where there is reason to believe they frequented the infected portions and contracted yellow fever before sailing. No measures of purification applied to the vessel could protect a crew so exposed to contagion on shore.

SPAIN.—The Monthly Bulletin contains reports from 49 provinces, with an aggregate population of 16,638,936, for the four weeks ending June 27, 1880. The total mortality being 31,017, the annual death-rate was 24.3 per 1,000. The principal causes of death were: Smallpox 689, scarlet fever 183, diphtheria and croup 561, whooping-cough 586, typhoid (enteric) fever 310, typhus fever 479, measles 961, consumption 1,633, acute lung diseases 3,057, and diarrhœal diseases 3,235. There were 344 deaths from accidents, 60 suicides, and 75 homicides. In comparing this and other European reports with those of the United States, the most conspicuous point of difference is the comparative absence of typhus fever in this country, where it is so rare as to give no appreciable death-rate for the whole population.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	91	1			8													1		2		3	3		3															12	10	3	90
Albany Hospital	Albany, N. Y	do	125	48		1		1													1		2																				19	12		55
Emigrant's Hospital	Ward's Island, N. Y	do	461	37			1	8					3	3	1	10									1	9		7									5	5		2					9	17	2	27
German Hospital	New York, N. Y	do	90	63									2								1	6			4																		28	18	1	72
Hart's Island Hospital	Hart's Island, N. Y	do	300	228			2																																				13	15	2	224
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	7																																								2		5
Rochester City Hospital	Rochester, N. Y	do	125	63				1																				2						1									6	3		66
Saint Mary's Hospital	do	do	320	220									1												3	2		2															11	5	1	225
Saint Barnabas Hospital	Newark, N. J	do	45	26		1	1	1																	1	1		2															1	2	1	24
Saint Michael's Hospital	do	do	140	141	2	1		12								2					2		1	4	5	6		18					1									22	20	5	138
Memorial Hospital	Orange, N. J	do	13	11				1																				1																		11
Germantown Hospital	Germantown, Pa	do	25	16																																							1	1		16
Saint Mary's Hospital	Philadelphia, Pa	do	80	23	2		1	7						2		4							6	2		4				1			1						1			5	3	1	25
Homœopathic Hospital	Pittsburgh, Pa	do	30	20																	1				1						1												7	2		25
Saint Franciscus Hospital	do	do		64									2	1							1											1											6	2		68
Freedmen's Hospital	Washington, D. C	do	300	243	1		1						1		1		1					1		2								1											24	10	7	250
Providence Hospital	do	do	160	113		1		22					1			1								5	3		5																20	16	1	116
Freedmen's Hospital	Augusta, Ga	do	50	18			1																					1													1					1	17
Georgia Infirmary	Savannah, Ga	do	50	39				1																1	2		2																5	4	1	39
Saint Mary's Hospital	Galveston, Tex	do	300	89	1			9								1								9	8		11					1		1									17	16	1	89
Cincinnati Hospital	Cincinnati, Ohio	do	500	299	1	4							1		2	7								14	6	2		12					2	1		3	2	2		2				64	60	5	304
Saint Luke's Hospital	Detroit, Mich	do	25	11																																							1	2		10
Alexian Brothers' Hospital	Chicago, Ill	do	70	67				7								1						2	1	2	5	6		6					1		2							22	21		68
City Hospital	Saint Louis, Mo	do	411	233	4	1	2	23					5	2		28									10	14		28					2	1	1	2							79	50	9	253
Saint Louis Hospital	do	do	250	76				5					1			4									10	15		25																		69
Naval Hospital	Chelsea, Mass	do	100	25																				1				1						1		2								1		24
Do	Brooklyn, N. Y	do	115	36				4						1		1									1			1								2							1	1		36
Do	Washington, D. C	do	50	10				1								1																												2		8
Do	Pensacola, Fla	do	20																																											1
Riverside Hospital	New York, N. Y	Contagious diseases	150	3																	1		1						1		2				1		1			1		2	5			8
Municipal Hospital	Philadelphia, Pa	do		17																																							13	5		25
State Hospital for Women and Children	do	Women and children	18	17																																								3		44
Children's Hospital	Washington, D. C	Children	72	39																																							4	1	1	41
Women's Hospital of Illinois	Chicago, Ill	Women	19	10																																							1			11
Insane Hospital	Augusta, Me	Insane	400	423				1																																		2	1	1	423
New Hampshire Asylum for Insane	Concord, N. H	do	300	289																																							5			294
Lunatic Hospital	Boston, Mass	do	200	166																																							3	7	1	161
State Lunatic Hospital	Worcester, Mass	do	650	543																																							3	2	1	543
Retreat for Insane	Hartford, Conn	do	150	144																																							4			148
Hospital for Insane	Middletown, Conn	do	517	518																																							2	1	3	516
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do		1278																																							6	6		1278
Hudson River State Hospital	Poughkeepsie, N. Y	do		243												1																												2	3	1	241
Marshall Infirmary	Troy, N. Y	do	200	131	1			1								1																												3	3		131
Willard Asylum	Willard, N. Y	do		1603																																							6	2	4	1603
State Hospital for Insane	Danville, Pa	do	700	477											1																												2		1	478
West Pennsylvania Hospital for Insane	Dixmont, Pa	do	500	589																																							3	3		589
Eastern Lunatic Asylum	Williamsburg, Va	do	356	332																																							3	1	1	333
North Carolina Insane Asylum	Raleigh, N. C	do		277																																							2		1	278
Alabama Insane Asylum	Tuscaloosa, Ala	do	420	412																																								2	1	409
Longview Asylum	Carthage, Ohio	do		673			1																																			5	7	1	670
Michigan Asylum	Kalamazoo, Mich	do	660	652																																							5	2	2	653
Minnesota Hospital for Insane	Saint Peter, Minn	do		666																																							5	2	1	668
Insane Asylum	Saint Louis, Mo	do		338																																							7	2	1	342
Insane Asylum of California	Stockton, Cal	do	1110	1113			1																																			4	3	4	1110

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	Aug. 14	2	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
Canada	Montreal	135,000	Aug. 21	70	27.0	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3	66
Cuba	Havana	195,437	Aug. 14	193	51.5	.....	.....	.....	44	.....	9	.....	5	.....	.....	.....	.....	83
Hayti	Aux Cayes	9,000	July 31	4	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Do	....do	9,000	Aug. 7	4	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Do	Port au Prince	30,000	Aug. 4	25	43.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93
Do	....do	30,000	Aug. 11	19	33.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
Bahamas	Turks and Caicos Isl'ds	3,500	July 31	3	44.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	....do	3,500	Aug. 7	4	59.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Do	....do	3,500	Aug. 14	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Guadeloupe	Point-a-Pitre	22,920	July 31	14	31.9	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	Matamoros	16,000	Aug. 14	10	32.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brazil	Rio de Janeiro	330,000	July 17	180	28.4	.....	.....	.....	6	.....	.....	.....	2	.....	1	.....	.....	.....
Do	....do	330,000	July 24	163	25.7	.....	.....	.....	4	.....	.....	.....	4	.....	.....	.....	.....	.....
Do	....do	330,000	July 31	170	26.8	.....	.....	.....	3	.....	.....	.....	3	.....	.....	.....	.....	.....
Do	Pernambuco	126,575	July 11	84	34.6	.....	.....	.....	1	.....	9	.....	1	.....	.....	.....	.....	.....
Do	....do	126,575	July 18	83	34.2	.....	.....	.....	1	.....	6	.....	2	.....	.....	.....	.....	.....
Do	....do	126,575	July 25	60	24.7	.....	.....	.....	.....	.....	11	.....	1	.....	1	.....	.....	.....
Do	....do	126,575	Aug. 1	71	29.2	.....	.....	.....	.....	.....	8	.....	1	.....	.....	.....	.....	.....
Teneriffe	Santa Cruz	16,610	June 24	5	16.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	81
Do	....do	16,610	July 31	2	6.5	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	82
Ireland	Queenstown	10,000	Aug. 14	7	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Aug. 14	86	19.5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	62
Scotland	Glasgow	589,598	Aug. 7	242	21.4	.....	.....	.....	.....	.....	.....	.....	15	.....	.....	.....	23	58
Do	Dundee	155,100	Aug. 7	40	13.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	60
Do	Leith	58,479	Aug. 14	27	24.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	12	62
England	London	3,664,142	Aug. 7	1,698	24.2	.....	.....	.....	.....	.....	2	.....	20	.....	.....	.....	121	60
Do	Bristol and Clifton	213,500	July 31	78	19.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....
Do	Tunstall	185,175	Aug. 7	78	11.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	.....
Do	Liverpool	544,056	Aug. 14	290	27.8	.....	.....	.....	.....	.....	.....	1	.....	16	1	18	21	64
Wales	Cardiff	82,364	Aug. 14	40	25.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	62
France	Rouen	104,902	Aug. 14	52	25.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Lyons	342,815	July 31	218	32.7	.....	1	.....	.....	.....	7	.....	4	.....	.....	.....	7	73
Switzerland	Zurich	22,103	Aug. 7	7	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Rotterdam	150,378	Aug. 14	76	26.3	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	.....	.....
Germany	Berlin	1,096,944	July 31	805	38.2	.....	.....	.....	.....	.....	.....	18	9	3	.....	139	55	66
Do	Breslau	276,000	July 31	228	43.0	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	63	65
Do	Bremen	109,000	July 31	40	19.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Brunswick	74,000	July 31	46	32.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....
Do	....do	74,000	Aug. 7	34	23.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....
Do	Mannheim	50,500	Aug. 7	20	20.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
Do	....do	50,500	Aug. 14	23	23.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63
Bavaria	Nuremberg	100,000	July 31	69	35.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	66
Saxony	Chemnitz	91,806	July 31	84	47.7	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	2	.....
Do	Leipsic	150,836	July 31	79	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Italy	Rome	303,383	June 19	153	26.3	.....	.....	.....	.....	.....	3	.....	5	.....	.....	.....	21	69
Do	....do	303,383	June 26	185	31.8	.....	.....	.....	.....	.....	8	.....	4	.....	.....	.....	23	72
Do	Genoa	182,000	Aug. 14	89	25.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
Austria	Vienna	746,243	Aug. 7	304	21.2	.....	.....	.....	.....	.....	12	.....	2	.....	.....	.....	7	62
Do	Trieste	128,233	July 31	90	36.6	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....
Russian Poland	Warsaw	357,159	July 31	277	40.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64
Sweden	Stockholm	169,429	July 31	104	32.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	13	62
Spain	Cadiz	65,028	Aug. 7	38	30.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	Malaga	115,882	June 7	125	56.2	.....	.....	.....	.....	4	1	7	2	.....	.....	.....	.....	.....
Do	Alicante	34,926	Aug. 7	21	31.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Morocco	Tangier	15,000	July 24	30	104.3	.....	.....	.....	.....	7	1	.....	.....	1	.....	.....	.....	80
Do	....do	15,000	July 31	33	114.7	.....	.....	.....	.....	5	.....	2	.....	.....	.....	.....	.....	83
Do	....do	15,000	Aug. 7	35	157.7	.....	.....	.....	.....	6	.....	1	.....	3	.....	.....	.....	85
Egypt	Alexandria	220,000	July 31	202	47.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	220,000	Aug. 7	161	38.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barbary	Tripoli	20,000	July 31	15	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
Africa	Cape Town	35,000	July 26	33	49.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64
East Indies	Calcutta	429,535	July 10	173	20.9	.....	6	.....	.....	.....	2	.....	6	.....	.....	.....	1	82
Japan	Kobé	18,282	July 10	13	37.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,282	July 17	7	20.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,282	July 24	8	22.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

National Board of Health

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REPORT ON THE SUBJECT OF ORGANIC MATTER IN THE AIR.

At the request of the National Board of Health, I undertook about a year ago an investigation on the best method for the detection and determination of the nature of the organic matter which is well known to exist in the air. I was perfectly conscious, at the outset, that very grave difficulties would be encountered in the course of such an investigation, and it seemed to me somewhat doubtful whether much of value could be established without the expenditure of a vast amount of labor—much more than was contemplated by the board or by myself. After due consideration, however, I began the work in the hope that, though the results reached might not be quite satisfactory, something more than is at present known might be learned concerning the subject under examination. Its importance seemed to warrant the attempt. The work has been prosecuted, with some brief necessary interruptions, throughout the academic year, and I herewith have the honor to submit to the board a report on the results reached. A preliminary report, giving an outline of the work, and not including any details in regard to the methods employed, has already been presented to the board, and published in the "National Board of Health Bulletin" for January 31, 1880. The present report will include, not only the details of the experiments referred to briefly in the published statements, but also of additional experiments, performed since the time of the first writing, with the object of more fully establishing the correctness of the conclusions first drawn, or of gaining new light upon the subject under investigation.

While I cannot claim to have added very much to the subject, I think it will be seen that greater exactness has been introduced in the methods of investigation than heretofore, and that the future possibilities are brought out more clearly. A firm basis for future work has been gained; some facts of permanent value have certainly been established; and, if the solution of the problem has not been reached, some, if not most, of the blame should be attributed to the nature of the problem itself. The work requires the greatest amount of patience and the greatest amount of skill. Without a combination of these two qualities the results reached would have no value. It has been my good fortune to have associated with me, at successive periods of the investigation, two gentlemen excellently qualified for the work, both thoroughly trained chemists, both conscientious, and gifted to an unusual extent with patience. I here desire to acknowledge my obligations to Mr. W. Mager and Mr. T. W. Day, who have acted as my assistants, and to whose zeal and industry much of what has been accomplished is due.

Introduction.

"Pure air" and "impure air" are expressions which carry with them but vague meaning. Air may, of course, be rendered impure in a great variety of ways, and produce upon those who breathe it an equal variety of effects. The most frequent kind of contamination of air is that which results from bad ventilation of apartments which are occupied by living beings, and every one has experienced to a greater or less extent the effects of this kind of contamination. For a long time it was thought that the bad effects produced by such air were due to the abnormal quantity of carbonic acid or carbon dioxide introduced by the breathing process, and this gas has been regarded as one of the most common enemies of mankind. Books have been written on the subject, and the popular mind is still thoroughly imbued with the idea that carbonic acid is the injurious constituent of the air of badly ventilated apartments. Many medical books, and even some which are specially devoted to chemistry, still serve to spread this idea. But it has been conclusively shown that carbonic acid may be introduced into air, otherwise pure, to a much greater extent than it is commonly introduced by the breathing process, even under the most adverse conditions of ventilation, without producing the characteristic effects of impure air, or indeed any disagreeable effects whatever. And Pettenkoffer has shown that the really injurious constituents are in all probability the refuse organic matters which are given off from the body, together with carbonic acid. These are in a condition of decomposition, and, if taken back into the system again, it is natural that there should be a more or less serious disturbance of the vital phenomena.

In order, then, to form an estimate of the purity or impurity of air, we ought to be able to determine the amount of the really injurious constituents present in it—*i. e.*, of the organic matters. It is well known, however, that the method usually employed for the purpose of testing the purity of the air consists in determining the amount of carbonic acid present. If the impurities are introduced by the breathing process the latter method is certainly of value, for it may be assumed that the proportion between the amounts of organic matter and of carbonic acid given off from the body is pretty constant; and hence, if we know the amount of carbonic acid present, we can draw a conclusion with reference to the amount of the organic matter, or rather with reference to impurity of the air.

Still there are circumstances under which the determination of the amount of carbonic acid in air would fail to give the information we desire, and, even under ordinary circumstances, it would be better if it were possible to determine directly the amount of the injurious constituents. It is believed, for instance, and apparently with justice, that the air of our dwellings and of other buildings is, in some way, very frequently contaminated by the gases arising from imperfect sinks and water-closets. It would plainly be impossible to determine the extent of the impurity thus introduced by the same method as is used for air contaminated by the process of respiration. For this purpose we need a method which shall enable us to determine directly the amount of the organic matter, and every one will at once recognize the importance of having such a method at our command. This need has been felt for some time, and attempts have been made to supply it, though these have not been very successful. It is not proposed to give here a *complete* historical sketch of the attempts that have been made from time to time, but the principal ones demand attention.

Historical sketch.

One of the first serious investigations on the subject under discussion which requires consideration here was undertaken by Dr. R. Angus Smith. His results are embodied in papers which appeared in the *Journal of the Chemical Society*, vol. xi, p. 217, *Chemical News*, 1870, and in a work entitled "*Air and Rain*" (London, 1872). Smith first endeavored to collect the organic matter by passing the air through water. In regard to this he says: "If air be passed through water a certain amount of this material (the organic matter) is obtained, but I have found it difficult to pass a sufficient quantity through. If it is made to pass rapidly, *absorption does not take place*, and evaporation of the water is the consequence; if it passes slowly, it requires several weeks to pass a hundred cubic feet through a small quantity of water. I continued the experiment for three months, but although I obtained sulphuric acid, chlorine, and a substance resembling impure albumin, I did not get enough to make a complete examination, and indeed this could not be expected, as I found that in that time less than one hundred gallons had passed through."

Finding this method of collecting impracticable, the author later describes another in these words: "A bottle of the capacity of about 2,000 cubic centimeters, or nearly two quarts, was filled with the air to be washed. This was done by means of a pump of the capacity of about a tenth of a cubic foot of a flexible material."

"The tube from the flexible pump in a closed state is put into the bottle, the mouth being left open, so far as the tube permits it. The pump is then drawn open, and the fresh air rushes into the bottle. The bottle contains 30 to 50 c. c. of the purest water. This is shaken with the air. Of course the tube is previously drawn out and the glass stopper put on. It is very important that the water should be pure." . . . . "Patience is not lost in excessively careful preparations for experiments of this kind." . . . . By experiment Smith found that one stroke with the pump, whose volume is twice as large as the volume of the bottle, is sufficient to refill the bottle. For determinations of the organic matter he fills it with bad air ten times; with good air *a hundred*, and in some cases even *a thousand times*.

This latter method certainly calls for a great amount of patience. Its tediousness is almost sufficient to exclude its use as a practical measure. It is not stated in Smith's papers whether the air that had been shaken with water was subsequently examined for organic matter or not; and it is questionable whether complete absorption can be effected in this way. From subsequent statements made by Smith it seems clear that if the air be drawn through a number of vessels and tubes for the purpose of securing complete absorption a considerable quantity of the substances which it is desired to obtain remains in contact with the walls of the glass vessels and tubes.

At first Smith confined himself to the action of the air under examination on a dilute solution of potassium permanganate. He noticed very marked differences in the effect produced upon the solution by air of different degrees of purity, and showed that, in general, the

purer the air the less reducing action does it exert upon the permanganate. The presence of nitrous acid and sulphurous acid, in city air especially, interferes very decidedly with the value of the permanganate test, and, though Smith is at first enthusiastic in regard to this test, he afterwards practically abandons it, preferring to determine only the nitrogenous material in the water after the absorption of the organic matter.

In 1872 Moss published (*Lancet*, p. 627) a paper "On the Estimation of Nitrogenous Organic Matter in Air." He passed the air through wash bottles containing pure water, and then examined the solutions thus obtained, according to the usual method for determining the amounts of free and potential ammonia.

In view of Smith's remarks on the use of wash-bottles, Moss's own description of his experiments would appear to condemn them as of little value, and it is, at least, surprising to learn that "in the whole of the experiments the quantity of air passed through the aspirator is corrected for temperature to 0° c. and for pressure to 30 in. barometer. Very little that is new is added to our knowledge of the subject by Moss's experiments, but they seem to indicate marked variations in the amounts of nitrogenous matter present in the air under different circumstances, and, in this respect, they confirm the results of Smith. The external air at Portsmouth contained, according to Moss, in a cubic meter an amount of combined nitrogen varying from 0.072 milligram to 0.274 milligram, while air taken from a hospital ward contained 1.542 milligrams, and that from a men's privy 1.133 milligrams in a cubic meter.

The sanitary department of Glasgow, under the direction of Dr. James B. Russell, medical officer of health, has for some time past published monthly reports on the air of the city. These reports are prepared by the chemist of the department—first, E. M. Dixon, B. Sc., and at present Wm. J. Dunnachie. Mr. Dixon devised a method for extracting the objectionable constituents from the air, which may be described in a few words: The air is drawn through three glass vessels, called absorbers, "about 7 inches long and 2 inches diameter, each of which is fitted with an india-rubber cork having two perforations for the insertions of glass tubes." Through one of these perforations in each cork a tube passes nearly to the bottom of the absorbers and there terminates in a flattened bulb around the outer edge of which a row of minute holes is drilled by a lapidary. The absorbers are connected by glass tubes which pass through the second opening of each cork. "To the last of the series of bent tubes an india-rubber pipe is attached, which communicates with the "inlet" of an ordinary gas-meter, registering from 0.01 to 1,000 cubic feet. The outlet of this meter opens into a cylindrical receiver, with which all the other meters of the station in a like manner communicate. A ½-inch lead pipe passes from the receiver, and is attached to the aspirator, which is in connection with the water main."

One series of the absorbers is used for the ammonia and albuminoid ammonia. In order to effect complete washing of the air a measured quantity of perfectly clean glass beads is placed into each glass, and the "rose," or perforated end of the glass tube, placed in position among the beads. "Each set of 'absorbers' is kept out twice for a period of forty-eight hours and once for one of seventy-two hours in each week. When returned, the tubes and absorbers are disconnected in rotation, emptied, and thoroughly washed with distilled water."

The work done at Glasgow seems to be rather more systematic and entitled to correspondingly more weight, than that done at many other places. It seems, however, justifiable to object to the use of a series of vessels such as is there employed. Smith's experiments prove that the use of complicated vessels, of which a considerable amount of surface is exposed, is fatal to accuracy and, although the errors in the Glasgow experiments must be very nearly constant, it is highly desirable to find a method involving simpler vessels.

At the observatory of Montsouris, near Paris, elaborate examinations of air are made, as well as at Glasgow. The method of washing the air is similar to that employed at Glasgow, though it appears, in some respects, to be somewhat less perfect. One modification deserves mention. The piece of the apparatus which corresponds to the "rose" of the Glasgow apparatus above described is made of platinum. Determinations are made of the ammonia and albuminoid ammonia.

It will thus be seen that the subject under discussion has seriously claimed the attention of those interested in the problems of sanitary science, and a great deal of time has been spent upon it.

New experiments on collecting organic matter from the air.

In beginning actual work it was first considered necessary to devise a more perfect method for the collection of the nitrogenous organic matter than had yet been described. A suggestion made by Chapman (*Chemical News*, 1870, p. 65) was taken advantage of, and, with the aid of some modifications, a very satisfactory and simple method was perfected after considerable work. Chapman used finely-powdered pumice-stone placed on a layer of coarser pumice-stone on wire gauze in a funnel. The material was first heated to redness and, before the air was drawn through, it was moistened with a little water. He says that he found this method satisfactory, though I have been unable to find a description of any experiments which furnish proof of its accuracy.

It seemed desirable to diminish, as much as possible, the surface of the absorbing material directly exposed to the air, and to increase the thickness of the mass through which the air was to be passed, so Chapman's apparatus was modified by using, instead of the funnel, a tube of three-eighths inch internal diameter, and from 5 to 7 inches long. This was drawn out at the lower end, so as to accommodate a small piece of rubber tubing, and in this form it is ready for use. After being carefully washed, it is filled with ignited pumice-stone. Experiments were at once undertaken to test the efficiency of the apparatus, and, as these yielded very satisfactory results, it may be best to describe here in detail the method of work.

Preparation of the Reagents.—As in all the experiments which form the basis of this report the object primarily sought for is the determination of very minute quantities of material, it is above all necessary at the outset to procure absolutely pure reagents, or, at least, to determine with the greatest accuracy the amount of impurity in the reagents used.

1. The *water* was carefully distilled, and then steam was passed through this for some time. Water thus prepared did not give the slightest evidence of the presence of ammonia when treated with Nessler's solution. If, however, 500 c. c. of this water were distilled through a carefully cleaned condenser, the first 100 c. c. of the distillate gave a slight test for ammonia. It might be thought that this ammonia came from the walls of the glass condenser or the connections, but this is apparently not so. For, if the distillation of a given specimen be continued until the distillate ceases to give the ammonia test, and a fresh specimen of the purified water be then distilled immediately through the same condenser, the first portions of the distillate give the same test as in the first instance. It seems indeed almost, if not quite, impossible to get water absolutely free from ammonia. This fact need not, however, interfere with the accuracy of subsequent determinations, for it is easy to determine the amount of ammonia which is given off from the purified water, and then to subtract this amount from the total found in the experiment. This was done in every case. Of course a considerable quantity of water may be purified at one time and kept carefully protected from the air for future use. If a determination of the amount of ammonia given off from 500 c. c. of this water is made, then it will be known how great a correction must be made in determinations made with this water.

2. The *standard ammonia solution* was prepared from pure ammonium chloride. The salt was purified by sublimation and finally by re-crystallization. 3.147 grams were dissolved in a litre of water (purified as above), and 50 c. c. of this concentrated solution were then diluted to one litre, so that one c. c. of the dilute solution corresponded to 0.00005 gram NH_3. This solution was used throughout the experiments.

3. A *solution of caustic potassa* was made by dissolving 400 grams of stick caustic potassa (Merck's, purified by alcohol) in water, and diluting the whole to one litre, so that 1 c. c. contained 0.4 gram KO,H. This solution was boiled for some time to drive off any ammonia contained in it.

4. A *solution of sodium carbonate* was prepared by dissolving 500 grams of the pure crystallized salt, $Na_2CO_3+10H_2O$, in water, and diluting to one litre, then boiling as before to drive off any ammonia present. 1 c. c. of this solution contains 0.5 gram $Na_2CO_3+10H_2O$.

5. A *solution of potassium permanganate* was prepared by dissolving 8 grams of $KMnO_4$ in water, and diluting to one litre, then boiling as before. 1 c. c. contains 0.008 gram $KMnO_4$.

6. The *pumice-stone* used in the absorbers was prepared by coarsely powdering the ordinary material, then sifting to get rid of the fine powder, then bottling that portion which consisted of pieces about the size of duck shot. The fine powder is objectionable on account of the bumping which it is pretty sure to cause when brought into water and distilled. The material as described is capable of absorbing nitrogenous matter from the air, as thoroughly as finer powder. Before each experiment the pumice-stone to be used should be heated to redness in a platinum crucible for some time. When filled into the carefully cleansed absorbing tubes the mass should be moistened with a little water.

In addition to the materials described above, a Nessler's solution is, of course, necessary for the estimation of the ammonia. This is prepared according to the ordinary directions.

Method of experimenting.—In order to make the determinations of the amounts of free and albuminoid ammonia obtainable from the organic matter of the air, the air to be examined is first drawn through the pumice-stone absorber by means of an appropriate aspirator. The volume of air necessary for a determination varies, of course, according to the amount of impurity. Usually from 50 to 100 litres were drawn through. After the absorption is completed, the pumice-stone is brought into a flask perfectly cleaned with the purest water and 500 c. c. of the same water and 5 c. c. of the sodium carbonate solution added. Connection is made with a clean condenser, and 100 c. c. distilled off (distillate A) and put aside in an appropriate vessel for treatment with Nessler's solution. A small amount of the distillate may be collected beyond this point and tested for ammonia, but it will usually be found to contain none.

Twenty c. c. of the potassium hydroxide solution and 50 c. c. of the permanganate solution are added to the contents of the flask, another 100 c. c. distilled off, and the distillate (distillate B) put aside.

Distillate A is now Nesslerized, and, after the necessary correction is made, the amount of ammonia found represents the *free ammonia*. Distillate B in like manner gives the *albuminoid* ammonia in the volume of air drawn through the absorbers. The results may then be made comparable with others by calculating for a given volume of air. The quantity of ammonia derived from the organic matter is usually stated *in milligrams in a cubic meter* of air, or *in grams in a thousand cubic meters*. The quantities given in this paper are according to the latter standard.

Unless special precautions are taken, great inconvenience, if not the destruction of the glass vessel used in the distillation, is caused by bumping. This can be prevented almost entirely by heating the flask quite slowly before beginning the distillation, and not allowing the flask to cool during the process of distillation. The solutions of potassium hydroxide and of the permanganate should also be hot when added.

If all the directions above given are carefully followed, no difficulty is experienced in making the estimations; though it will be seen that the great number of precautions necessary make the work very tedious.

Experiments to determine the efficiency of the pumice-stone tube.—The absorber having been prepared as above described, air was drawn through it, and then through four wash-bottles. 91.5 litres of air were drawn through in the first experiment. In each of the wash-bottles there were 50 c. c. water, and in the first one there were further 5 c.c. dilute hydrochloric acid. The time occupied in drawing the air through in this experiment was ten hours. On now bringing the pumice-stone in water and distilling as above described with the necessary reagents for the purpose of determining the entire quantity of ammonia obtainable from the collected material, an amount corresponding to about 0.3 gram in 1,000 cubic meters of air was found. On examining the wash water contained in the four flasks, only the quantity of ammonia known to be present originally was found. Then the air was passed successively through two pumice-stone tubes, and, while the first yielded a considerable quantity of ammonia, the second did not yield even a trace. After this, air drawn through a vessel containing decaying meat was used, the experiments otherwise being exactly like those just described. Three pairs of parallel experiments were performed and these gave the quantities of ammonia stated below, calculated for 1,000 cubic meters of air:

Series.	First experiment.	Second experiment.
	Gram.	*Gram.*
A	0.457	0.45
B	0.608	0.527
C	1.092	1.153

The wash water in the three flasks used in each experiment was now examined, and again only the original quantity of ammonia was found. It is thus shown conclusively that the pumice-stone tube is an efficient absorber of the nitrogenous organic matter contained in the air. As regards the rapidity with which the air is drawn through the absorber, it seems to make very little difference what the rate is. A number of experiments were performed to test this. The rate of passage was varied between ten litres in two hours and the same amount in forty-five minutes. In all cases, however, no ammonia was obtained from absorbents placed between the first pumice-stone tube and the aspirator.

The *absorber* employed in these experiments can then, I think, be recommended as the best thus far used. It is simpler than that introduced by Dixon at Glasgow, or that used at Montsouris, and, at the same time, while accomplishing everything which is expected of the two forms mentioned, it is free from what appears to me to be a very serious objection to these, viz, the exposure of a considerable glass surface to the action of the air under examination. The new absorber is shown to collect all the nitrogenous matter, and there is no reason to doubt that the pumice-stone gives up all the nitrogen again when distilled with the proper reagents. The unqualified recommendation of the apparatus which I am able to give is founded upon a very large number of experiments which need not be described individually here. One was but a repetition of those which preceded it, with the exception of some minor modifications, and, as the figures actually obtained furnish but little proof of the accuracy of the work, they may be omitted.

Parallel experiments to determine the reliability of the results.—Having shown that the nitrogenous matter can be completely absorbed by the pumice-stone, the next question to be answered was, whether the results obtained can be depended upon? Will the method employed always give the same results when applied under the same circumstances? As far as I can learn from the literature of the subject, very little, if any, effort has thus far been made by experimenters in this field to determine the reliability of the different methods employed. As the air in any place is likely to undergo change from day to day, it is plain that the only way to test any given method fairly is to *examine at the same time specimens of the same air*, so that parallel experiments were always carried on. Sometimes, indeed, three experiments with the same air were carried on at the same time for the purpose of more thorough verification.

At first the total amount of ammonia was determined, and afterwards determinations of the free and albuminoid ammonia were made. Here I shall confine myself to the first experiments. In all cases the amounts stated correspond to 1,000 cubic meters of air.

External air, taken from a height of about 25 feet above the ground, was drawn by means of aspirators in the usual manner through pumice-stone tubes.

Series.	First experiment.	Second experiment.	Third experiment.
	Gram.	*Gram.*	*Gram.*
A	0.343	0.361	0.439
B	0.457	0.45	.....
C	0.608	0.527	.....
D	1.092	1.153	.....

A number of other experiments were performed of the same kind as those above considered, and these yielded practically the same results; that is to say, the agreement between the results obtained in parallel experiments was in no case poorer than that observed above. If we remember what extremely small quantities of matter we are here dealing with, the agreement must be regarded as fairly satisfactory, so that the method may without doubt be used with advantage whenever it is desired to obtain information in regard to the total amount of nitrogenous or ammoniacal matter contained in the air.

Are all organic matters retained by the pumice-stone?—While the pumice-stone absorber enables us to collect and estimate the amount of nitrogenous matter in the air, the question remains open whether there are not other organic matters not containing nitrogen which may pass through the absorber? To test this point, contaminated air was drawn through pumice-stone and then through a flask containing a very weak solution of potassium permanganate. If organic matter passes through the absorber the effect ought to be shown upon the permanganate solution. The result of the experiments in this direction was to show conclusively that something passes through the absorber which exerts a reducing action upon the permanganate, and previous experiments have shown that this is not nitrogenous. The entire unreliability of the permanganate method for determining the quantity of organic matter present prevented the making of any quantitative experiments, but some experiments were performed for the purpose of discovering approximately the proportion existing between the non-nitrogenous oxidizable material and the nitrogenous. Air from the same source was passed at the same time: 1st, through pumice-stone and a weak solution of permanganate; and 2d, through a permanganate solution alone of the same amount and same strength as in the first experiment. The amount of air which was freed from nitrogenous material by the pumice-stone required to decolorize the permanganate solution was then noted, and the amount of air not passed through pumice-stone required to accomplish the same result. The results reached in these experiments were not satisfactory, but they showed that, as would naturally be expected, the air from which the nitrogenous material had not been removed contained more oxidizable material than that which had been passed through the pumice-stone. They throw no light whatever upon the important question, whether the non-nitrogenous oxidizable material is injurious or not; and until this question is answered, it will be impossible to say how much weight should be attached to determinations of the nitrogenous constituents as a means of judging of the purity of the air. It is undoubtedly true that at present we possess no method that can give more than a faint intimation of the presence of non-nitrogenous organic matter in the air, and if these could be shown to be injurious, we should be in a sorry plight indeed, as far as our power to determine the amount of impurity is concerned.

Reliability of the results obtained in determining ammonia and albuminoid ammonia.—After the collection of the material from the air, the problem of its examination becomes very similar to that of the examination of the organic matter in water. It is known that great differences of opinion exist among those who have worked on the latter problem, and it can safely be said that up to the present no satisfactory conclusion has been reached. It is not necessary to enter into the discussion as to the relative merits of the different methods which are in use or which have been recommended for the determination of organic matter in the air. It is plain that it is not of so much importance to sanitarians to know the total amount of organic matter, that is, matter containing carbon, in the air, as to know the amount of those particular organic matters which are most likely to be injurious. These are commonly supposed to be nitrogenous, on the assumption that they are derived from animal substances which nearly always contain nitrogen.

The *albuminoid ammonia* process, as developed by Wanklyn, Chapman, and Smith (*Journal Chem. Society*, N. S., vol. v, p. 591; Wanklyn, *Water Analysis*, fourth edition, p. 25), has attracted a great deal of attention, and has been extensively used. As is well known, this

process depends upon the fact that many nitrogenous organic substances give up their nitrogen in the form of ammonia when treated with potassium hydroxide and permanganate. If we then have a mixture of substances consisting, on the one hand, of ammonia or volatile ammoniacal bases (ethylamine, methylamine, etc.), and, on the other hand, of various nitrogenous organic substances, containing nitrogen in different forms of combination, we can distinguish between the two kinds of substances. The original mixture is treated with sodium carbonate, and water, and the ammonia given off under these circumstances is classed as *free ammonia*. On then treating the residue with potassium hydroxide and permanganate a new portion of ammonia is given off. This is classed as *potential* or *albuminoid ammonia*.

I will here call attention to experiments undertaken to decide whether this method gives concordant results when applied to the examination of the material collected from the air in the pumice-stone absorber. A large number of parallel experiments was performed for this purpose. The results of some of the typical are here communicated.

First series. (*Laboratory air.*)

1st experiment—Free ammonia	0.37	gram.
Albuminoid ammonia	0.28	gram.
2d experiment—Free ammonia	0.36	gram.
Albuminoid ammonia	0.36	gram.

Second series. (*Air through decaying meal.*)

1st experiment—Albuminoid ammonia	0.45	gram.
2d experiment—Albuminoid ammonia	0.50	gram.

Third series. (*External air.*)

1st experiment—Free ammonia	0.120	gram.
Albuminoid ammonia	0.345	gram.
2d experiment—Free ammonia	0.073	gram.
Albuminoid ammonia	0.457	gram.

Fourth series. (*External air.*)

1st experiment—Free ammonia	0.128	gram.
Albuminoid ammonia	0.215	gram.
2d experiment—Free ammonia	0.120	gram.
Albuminoid ammonia	0.241	gram.
3d experiment—Free ammonia	0.157	gram.
Albuminoid ammonia	0.292	gram.

Fifth series. (*External air.*)

1st experiment—Free ammonia	0.067	gram.
Albuminoid ammonia	0.093	gram.
2d experiment—Free ammonia	0.064	gram.
Albuminoid ammonia	0.14	gram.
3d experiment—Free ammonia	0.07	gram.
Albuminoid ammonia	0.08	gram.

Sixth series. (*External air.*)

1st experiment—Free ammonia	0.103	gram.
Albuminoid ammonia	0.051	gram.
2d experiment—Free ammonia	0.09	gram.
Albuminoid ammonia	0.05	gram.
3d experiment—Free ammonia	0.074	gram.
Albuminoid ammonia	0.041	gram.

Seventh series. (*Air contaminated by breathing.*)

1st experiment—Free ammonia	0.287	gram.
Albuminoid ammonia	0.339	gram.
2d experiment—Free ammonia	0.220	gram.
Albuminoid ammonia	0.309	gram.

Eighth series. (*Laboratory air.*)

1st experiment—Free ammonia	0.0793	gram.
Albuminoid ammonia	0.440	gram.
2d experiment—Free ammonia	0.075	gram.
Albuminoid ammonia	0.42	gram.

Ninth series. (*Laboratory air.*)

1st experiment—Albuminoid ammonia	0.22	gram.
2d experiment—Albuminoid ammonia	0.195	gram.

The results recorded above will, I think, serve to give a fair idea of the accuracy of the method involved; and it will be seen from them that, in determinations of the organic matter made in one and the same specimen of air, there is liability of considerable variations, due, as it seems, to the imperfection of the method. The results obtained, then, cannot be regarded as accurate or anything like accurate, but, at the same time, the method is capable of showing changes in the amount of nitrogenous organic matter when these are considerable. The difference between ordinary impure air and pure air can easily be detected, but slight variations, such as may take place from day to day, of a fairly pure atmosphere can hardly be determined with any degree of confidence.

Variations produced in the amount of nitrogenous organic matter in air by different causes.—After having succeeded by long continued labor in getting a satisfactory method for the determination of the ammonia and albuminoid ammonia obtainable from the nitrogenous organic matter of the air, the next step in the inquiry was the examination of air purposely contaminated by different causes. I regret that the amount of time necessarily spent on the first part of the problem, *i. e.*, the devising and testing of the method, was so great as to leave very little for a study of its applications to practical cases. But it may be said that the whole subject is now in such condition that these applications can be made comparatively readily, and at the close of this report suggestions will be made with reference to the study of the air by the perfected methods.

1. *Decaying meat* was first employed as a means of contamination. Meat in active decomposition, and giving off an unendurable odor, was placed in a bottle with a little water, and air drawn through this bottle in such a way as to cause *constant bubbling of the water.* Special precautions were taken to secure complete absorption, but it was found that at least all the *nitrogenous material* was absorbed by one pumice-stone absorber. The air freed from nitrogenous material still possessed a very disagreeable odor, and would certainly be instinctively avoided by any civilized human being. Several experiments of this kind were performed and always with the same result, *i. e.*, there was not found an excess of albuminoid ammonia over that ordinarily found in the open air. The amounts in some cases were indeed less than is frequently found in external air.

Now this unexpected result may be interpreted in two ways. If we assume that the air which was passed through the bottle with the decayed meat was unfit for breathing purposes, and we can hardly avoid this assumption, if we take the horrible odor into consideration, then, as no excess of albuminoid ammonia was found, the conclusion would naturally follow that the amount of albuminoid ammonia found in air is not a measure of the organic impurities, a conclusion which is plainly of the very highest importance in this connection.

Again, if we assume that albuminoid ammonia *is* a measure of the organic impurities of the air, then it would follow that the organic matter is effectually retained by the water.

In a paper read before the Philosophical Society of Glasgow, February 18, 1880, Dr. Neil Carmichael briefly discusses the question here suggested. The subject of the paper is "The trap and water-closet system and the relations of the same to sewage products, gaseous and other." He refers to some air analyses published in the reports on the air of Glasgow by the sanitary department, and finds that air a few feet over the Clyde, under the Broomielaw bridge, is rather more free of impurities than the air taken from the city, that is, it contains less organic matter. Still the water of the Clyde at the same point, on being analyzed, was found to contain 0.263 grains free ammonia, and 0.065 grains albuminoid ammonia per gallon, representing a very large amount of organic impurity. He then says: "The organic particles are rendered so heavy by soaking with water that they are not raised with the aqueous vapor, or by wind blowing over the surface. Marshes and swamps, in a dry season, when the water is low and the particles are drying on the muddy sides and on the vegetation on the banks, are frequently highly pestilential. Mr. Baldwin Latham in his work on *sanitary engineering* on this point says: 'One thing is certain, with reference to malaria, that all authorities are agreed that it is never extricated from a water surface.' These methods of answering the question are, however, not quite conclusive, although they doubtless show a high probability in favor of the opinion expressed. I therefore set myself, by direct experiment, to determine the point." The author's method consisted in drawing contaminated air through water and then studying the effects of this air upon various liquids capable of nourishing germs. His conclusion is that germs do pot pass through the water. With reference to water-traps he says: "They exclude the soil-pipe atmosphere to such an extent that what escapes through the water is so little in amount, and so purified by filtration, as to be perfectly harmless."

Dr. Carmichael regards my experiments with air contaminated with decayed meat, described briefly in the preliminary report published in the "National Board of Health BULLETIN" for January 31, 1880, as confirming the conclusion that water retains the organic matter from air passed through it. This, however, is only true, if we assume that albuminoid ammonia is a measure of the organic impurities. There still remains the suggestive odor of the air, after it has passed through the water, to be explained. Is this air, in spite of its odor, harmless? Special experiments would be required to answer this question.

Within a very short time Werniche (*Virchow's Archir*, 79, 424) has published an elaborate paper on the air as a transporter of germs, and in this he shows that bacteria are not taken up from a putrefying liquid or moist slime, but when there are bubbles in the liquid which break and throw up a spray the air becomes contaminated.

2. Air was next contaminated by means of meat which was allowed to pass to the last stages of decomposition and gradually become dry. The experiments with this air were carried far enough to show that it yelds a considerably larger amount of ammonia and albuminoid ammonia than ordinary air, and the conclusion may be drawn that "malaria" if, as is supposed, it arises from dried matter, will probably be found to yield an abnormally large quantity of albuminoid ammonia. Experiments upon this point are, however, entirely wanting up to the present.

3. Finally, air contaminated by the process of respiration was examined. For this purpose an air-tight box, about three feet long by two feet high and two broad, was prepared, and into this was placed a good-sized dog. Air was then drawn slowly through this box and examined as usual. Two determinations are here given. These were made at the same time.

1st experiment—Free ammonia	0.287	gram.
Albuminoid ammonia	0.339	gram.
2d experiment—Free ammonia	0.220	gram.
Albuminoid ammonia	0.309	gram.

The amount of ammonia and of albumoid ammonia found are somewhat larger than the amount found in the external air at about the same time, though not as great as were found in some experiments with external air at other times.

Two dogs were then placed in the box and the air examined in the same way. No perceptible change was noticed in the composition of this air compared with that contaminated by the presence of one dog in the chamber.

In this connection, it should be remarked that Smith made use of the permanganate test to examine air contaminated by the breathing process, and noticed an increase of oxidizable material in such air. But he did not observe a difference when two persons were placed in the lead chamber (which corresponded to the dog-box used in the experiments described above) and when there were three. In regard to this point he says: "The cause may be that only a limited quantity is kept in suspension in the air, the rest being deposited."

Apparently the most remarkable results yet reached in the analysis of air are those recently described by W. Van Slooten (*Journal American Chemical Society*, I, 263), who undertook to determine the *free* and *albuminoid ammonia* in the air of New Orleans during a part of the year 1878, covering the period of the yellow-fever epidemic. He found: "First, that the air was abnormally charged with albuminoid ammonia during the epidemic: second, that the abnormality disappeared with the fever; third, that the atmosphere not in immediate connection with the ground was comparatively free from any abnormal variations from an average standard." It would be venturesome to accept these results without verification. The figures given by Van Slooten are certainly in accordance with the view that, at the time of the epidemic, the air is abnormally charged with albuminoid ammonia. This may be true, and, nevertheless, it may be that no direct conection exists between the epidemic and the albuminoid ammonia. Conclusions like that of Van Slooten can only be of value when it has been shown that during an epidemic there is more albuminoid ammonia in the air than there is at the same period of other years when epidemics are not raging. It should, further, be said that the description of Van Slooten's experiment is not calculated to inspire confidence in the results, and, until further evidence of the accuracy of the work is furnished, not much weight can be attached to his statements.

Ammonia and albuminoid ammonia as measures of the impurity of the air.—From what was said above, it will be seen that the question whether the amounts of ammonia and albuminoid ammonia yielded by air can be regarded as reliable measures of the impurity of the air is still an open one. Up to the present the nitrogenous materials have been regarded as the really injurious ones, and an increase in the quantity of the two forms of ammonia has been sufficient to condemn the air yielding it. In Dr. Smith's works it is constantly assumed that the substances yielding ammonia are the injurious ones, and so, too, it is common to regard the analogous substances found in water as the objectionable ones. In a recent work by C. B. Fox the same idea is upheld. He says: "Ammonia, which in itself is harmless, is a product of animal organic matter, and is present in air in exceedingly variable quantity, out of which it is washed by the great air cleanser, rain." Again he distinctly says that the ammonia in the air is "derived from decomposing animal matter, such as manure, sewage, effete matter from the lungs and skin of men and other animals."

In a discussion of the results reached in the air analyses of Glasgow and Montsouris, above referred to, Dr. James B. Russell calls special attention to the fact that the analyses show in general *that there is an increase of ammonia and albuminoid ammonia in the winter months.* The Parisian and Glasgow results both agree in this respect. Accepting this as a general truth, it is plain that the source of the nitrogenous matter cannot be mainly decaying organic matter. If the latter were the source, the largest amounts of the two ammonias should be found in the summer months. Dr. Russell unhesitatingly accepts the view that a comparatively prolific source of the nitrogenous matter is the combustion of coal, which would of course account for the increase noticed in the winter months. This gives rise to new difficulties; for the question is in each result, how much of this nitrogen is derived from decomposition and how much from combustion?

The simple statement of fact that a given sample of air yields an abnormally large quantity of albuminoid ammonia is not sufficient to enable us to draw a conclusion with reference to the purity of the air. We must know at what season of the year the air was collected, and whether in the city or country; in fact, we should know everything possible concerning the air, and then let the conclusion finally drawn be a resultant of all the facts. It is probable, however, from what is now known, that the determination of the amount of albuminoid ammonia yielded by air may under many circumstances furnish us with important information concerning the quality of the air, but great caution is necessary in dealing with this principle of examination.

General conclusions.

In looking back over the field traversed I cannot avoid a feeling of dissatisfaction. A great deal of time has been spent in this investigation. Constant attention to minute details has been necessary, and at times disappointment has followed disappointment. Here and there, however, light has been thrown upon the subject; and whatever its future development may be, I think the facts established here will always stand. Let us, then, pass quickly in review the main results.

1. The nitrogenous matter of the air may be thoroughly collected by means of the pumice-stone absorber described in this report.

2. The total amounts of ammonia found in experiments performed at the same time with the same specimens of air agree fairly well with one another; so much so as to warrant the use of the method for the examination of the air.

3. When free and albuminoid ammonia are determined, the results obtained do not always agree very closely, but still the agreement is sufficient to enable the experimenter to detect such variations as are likely to occur between pure and impure air.

4. Air contaminated by being drawn through water containing decaying meat does not yield more than the usual quantity of albuminoid ammonia.

5. Air contaminated by being drawn over comparatively dry decaying organic matter yields more than the usual quantity of albuminoid ammonia.

6. Air contaminated by respiration yields more than the usual quantity of albuminoid ammonia.

7. It is necessary in judging of the purity of air to take all the facts known in regard to it into consideration. The simple determination of any one constituent can never be a sufficient basis for the formation of a competent judgment.

8. It would be useless to have examinations of air made by any but the most careful workers. It would be time thrown away to have such analyses made by the average practical chemist.

Finally, as to suggestions for the future. A number of questions have been left unanswered in this investigation. A very important one is this: Is the air which has been deprived of its nitrogenous matter also deprived of its injurious constituents? If this is ever to be answered, it is evident that it cannot be by chemical methods. The effect of the air on fermentable liquids must be studied, and also on animals. Can an animal continue to breathe normally in such air?

A second question which ought to be answered is this: Does the amount of organic matter in the air vary with different conditions of the air, as, for instance, with the hygrometric state? This can only be answered by a long-continued, systematic series of examinations of the air, such as are at present being made at Glasgow, Montsouris, and at some places in Germany. It may be said, however, that, up to the present, no connection has been observed between the amount of organic matter and other conditions of the air.

Again, it would be interesting to determine how much nitrogenous organic matter from ordinary contaminating sources can be held in suspension in the air.

Many other questions suggest themselves, but those given above indicate that an almost unlimited field opens before us, and show clearly that the only way in which results of great value can be reached is by united effort. A single individual can do little more than point out the way in which results may be reached, and clear the road for advances. It will only be when health departments in a great many places are impressed with the importance of such subtle examinations as those of the air, and provide the means for making them through long periods, that our knowledge will be materially increased on the subject treated in this report. When records, made year after year by competent men using the best methods, are in our possession, then probably conclusions of great importance for sanitary science will be drawn.

IRA REMSEN.

NOTICE.—After August 28, the reports from hospitals in the United States will be published every four weeks in a table giving the totals for that period. Only those hospitals sending reports for the four weeks will be represented in the table.

REPORT ON THE ADULTERATION OF DRUGS.

Inquiries having been made by the National Board of Health as to the propriety of legislation to prevent the adulteration of medicinal drugs, the committee of the Philadelphia Drug Exchange, to whom the matter was referred, present the following report as the result of their careful consideration of the subject:

REPORT.

Having given the question of the adulteration of medicinal drugs attention on this as well as on previous occasions, we desire to report that to the best of our knowledge and belief such adulteration is of limited extent, but were the evil so great a one as seems to be apprehended, it would be almost impossible to correct it by legislation.

The articles are so numerous and pass through so many hands before reaching the consumer, that any law would either be oppressive in being enforced, or inoperative through failure to extend its action to the extreme reach of its requirements. It would be impracticable to so regulate the power of the officers charged with its execution that well-recognized private rights of manufacturers and dealers could be held safe from infringement.

Processes, the result of large expenditure or of long experience, might be subject to examination and publicity; operations with articles in a formative state might be stopped; stocks in the hand of manufacturers or dealers might be liable to investigation at any time—possibly many times—and might, perhaps, be jeopardized by the application of a standard not justified by the use of the article.

In this respect the officer would not be limited, for of necessity much discretionary power would be delegated to him, and this might be wisely or unwisely used. An incompetent or captious officer might cause incalculable difficulty and pecuniary loss by an erroneous judgment, an unaccommodating disposition, or a spirit to exact the letter of the law according to his own interpretation.

Losses in mercantile transactions might be entailed, for referred cases on appeal would doubtless be numerous, and markets would be changing in prices while awaiting authoritative decision.

Should objectionable preparations be found, the responsibility for them would be difficult to fix, as the holder might be innocent, equally so the manufacturer, and the fault lie somewhere between. To make examinations complete they would have to follow the article through its whole course in trade. It is easy to see what great embarrassment to business must ensue and what the uncertainty of result.

As before stated, we are satisfied that the extent of adulteration of medicinal drugs has been overestimated. Perhaps this is due to the publicity given to the few reported cases of the kind; but this publicity itself forms a corrective to their increase.

The retail druggists and physicians who purchase from the wholesale dealers and manufacturers should be fully capable of discrimination, and disposed to buy only of those who deal in the purest articles and who are known to the trade as houses of integrity. This, after all, would be the greatest safeguard to consumers of medicinal drugs. Since the establishment of colleges of pharmacy special attention has been given to purity of medicinal preparations and with marked success, as is shown by the known sympathies and practices of their graduates as a class; and the journals published by these institutions exercise a wholesome effect by denouncing unworthy preparations.

EDWARD H. HANCE,
Chairman.
WILLIAM GULAGER.
H. N. RITTENHOUSE.
ALEXANDER H. JONES.
C. A. KURLBAUM.
VALENTINE H. SMITH.

The above report was adopted by the board of directors of Philadelphia Drug Exchange at a special meeting held December 30, 1879.

H. B. ROSENGARTEN, *President.*

H. C. McILVAINE, *Secretary.*

INSPECTORS' REPORTS.

MEMPHIS, TENN., August 31.—Dr. R. W. Mitchell, member of the National Board of Health, forwards a report of Dr. C. A. Rice, inspector at the quarantine station near Vicksburg, dated August 29. The tow-boat *Raven*, with barges, arrived August 28, with five sick on board. The boat was detained for observation, but there were no means of preventing desertion of the crew; about half of them left, intending to go to Vicksburg. The five sick men were removed to a float, and on examination of their history and symptoms, Dr. Rice concluded that they were affected with *dengue* fever, which Dr. Collins reports to be prevalent in New Orleans. From the detailed account of the several cases, as given by Dr. Rice, the above opinion was regarded by Dr. Mitchell as probably correct.

NOTICE TO PILOTS.

The following notice has been issued by the mayor of Fernandina, Fla.:

MAYOR'S OFFICE,
Fernandina, August 20, 1880.

Pilots will in all cases, before boarding, make inquiry as to the sanitary condition of the vessels destined for this port.

Vessels with cases of sickness on board, or on which serious cases have occurred during the voyage, will be ordered to proceed at once to the national quarantine station at Sapelo. All other vessels will be governed by the quarantine laws now in force.

By order of city council of Fernandina.

JAMES McGIFFIN,
Acting Mayor.

W. F. WOOD, Jr., *City Clerk.*

ABSTRACTS FROM CONSULAR REPORTS.

BAHIA, BRAZIL.—A letter from United States Consul R. A. Edes is forwarded by S. C. Cobb, president of the board of health of Pensacola, Fla. The consul states that the British bark Bonnie Dundee, bound for Pensacola, obtained a clean bill of health from Bahia, July 18, on a statement that the vessel had been free from disease while in that port. It was afterward ascertained that yellow fever had occurred on board the vessel, and one man was sent to hospital with that disease after the bill of health had been granted. This notice being received at Pensacola before the arrival of the bark, proper precautions will be taken.

CALCUTTA.—Reports for May, 1880, record 580 births and 706 deaths during the month. Annual birth-rate 15 per 1,000, death-rate 19.7. Cholera caused 47 deaths, small-pox only 4, "fevers" 204, diarrhœal diseases 75.

GUAYMAS, MEXICO.—United States Consul A. Willard reports, for the month of July, 18 deaths in a population of 5,500. Of these, two were from violence, leaving an annual death-rate from diseases of 35 per 1,000. Only four of the decedents were adults; the rest were under 5 years of age, and several deaths were due to whooping cough. Mean temperature 88.4; sanitary condition good.

SABANILLA, UNITED STATES OF COLOMBIA.—United States Consul E. P. Pellet writes, under date of August 18, that on the 10th a fatal case of yellow fever occurred in a young American just arrived from the interior. He had been for two years at Puerto Berrio, a most unhealthy place. Imprudence in diet is supposed to have aided in developing the disease.

SANTIAGO DE CUBA, August 25.—United States Consul J. C. Landreau reports that correct statistics are difficult to obtain. The report for the month of July gives 154 cases of yellow fever, but these figures cannot be relied on as accurate. The disease is, however, epidemic in the city, and bills of health are issued accordingly.

SINGAPORE.—United States Consul A. G. Studer reports that up to July 17 no epidemic or contagious disease has prevailed in this port or in the adjacent country.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BROWNSVILLE, TEX.—Dr. E. Nelony, health officer, under date of August 16, reports two cases of confluent small-pox, being the first cases reported this season. In the first, a child of 5 years, the origin of contagion could not be traced. The second, a woman of 35, contracted the disease from a case in Matamoros. Neither of the patients had ever been vaccinated. Due precautions are taken to prevent the spread of the disease.

HAVANA, CUBA.—During the week ending August 27 there were 28 deaths from yellow fever, mostly occurring among civilians and sailors. But few vessels have discharged at the wharves during the month of July without having some cases of yellow fever on board, though some have been so mild in type as to give some excuse for the captains denying that the disease had appeared on their vessels at all.

The following vessels, which had sailed or were about to sail for ports in the United States, are believed to have had yellow fever on board while at Havana: American bark *Payson Tucker*, for Delaware Breakwater, August 21; Spanish bark *Antonio Batet*, for Brunswick, Ga., August 23; American schooner *Emma F. Lewis*, for Washington, D. C., August 25; American brig *Martha A. Berry*, for Boston, August 25; Spanish bark *Maria Coruña*, for Cat Island, Miss., August 27; American brig *Ortolan*, for Philadelphia, to sail August 29.

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEATH FOR THE FOUR WEEKS ENDING AUGUST 7, 14, 21, AND 28, FROM THE FOLLOWING PLACES.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	10.3	31.0
Concord, N. H	5.6	14.9
Boston, Mass	14.9	28.9
Cambridge, Mass	11.4	22.1
New Bedford, Mass	15.9	29.9
Newburyport, Mass	1.9	22.6
Marblehead, Mass	12.5	28.6
Fall River, Mass	16.8	32.4
Plymouth, Mass	12.8	29.4
Lawrence, Mass	12.7	23.1
Worcester, Mass	9.0	18.8
Lowell, Mass	19.8	29.2
Lynn, Mass	16.1	26.4
Brockton, Mass	10.5	22.0
Chicopee, Mass	8.3	17.8
Somerville, Mass	9.9	17.2
Fitchburgh, Mass	7.2	18.6
Springfield, Mass	11.0	24.4
Providence, R. I	9.3	20.0
New Haven, Conn	5.8	16.1
New Britain, Conn	9.3	17.7
Burlington, Vt	8.7	13.4
New York, N. Y	9.7	19.5
Brooklyn, N. Y	14.5	26.2
Yonkers, N. Y	10.3	20.6
Poughkeepsie, N. Y	7.1	19.3
Newburgh, N. Y	6.5	16.6
Rochester, N. Y	7.2	24.9
Buffalo, N. Y	8.8	18.0
Hudson County, N. J	12.1	24.4
Orange, N. J	11.7	23.5
Camden, N. J	12.2	26.8
Philadelphia, Pa	8.7	20.0
Erie, Pa	9.1	18.7
Pittsburgh, Pa	11.8	21.3
Baltimore, Md	13.0	19.7
District of Columbia	10.6	21.7
Norfolk, Va	12.9	27.8
Richmond, Va	14.3	27.8
Lynchburg, Va	7.9	21.4
Wilmington, N. C	7.4	16.3
Augusta, Ga	7.7	19.3
Atlanta, Ga	9.2	19.5
Jacksonville, Fla	5.2	14.3
Mobile, Ala	8.5	21.2
Selma, Ala	31.3	44.1
New Orleans, La	7.7	22.3
Austin, Tex	4.1	10.6
San Antonio, Tex	10.1	20.2
Nashville, Tenn	11.6	25.9
Louisville, Ky	5.4	13.1
Cincinnati, Ohio	8.7	19.7
Dayton, Ohio	5.7	15.1
Indianapolis, Ind	7.6	19.7
Evansville, Ind	9.5	29.0
Richmond, Ind	6.2	14.5
Chicago, Ill	14.5	23.4
Peoria, Ill	4.8	11.2
Aurora, Ill	13.0	21.7
Milwaukee, Wis	7.0	25.7
Saint Paul, Minn	12.6	22.0
Keokuk, Iowa	2.5	11.5
Omaha, Nebr	6.3	22.6
Salt Lake City, Utah	6.7	11.5
Sacramento, Cal	3.6	12.1
Los Angeles, Cal	5.9	15.4
San Francisco, Cal	7.1	18.8

DIAGRAM EXHIBITING THE SAME FOR THE MONTH OF AUGUST, 1880, FOR THE FOLLOWING PLACES.

Kingston, N. Y	17.1	42.7
Little Falls, N. Y	8.7	20.9
Elizabeth, N. J		22.7
Petersburg, Va	10.9	28.4
San Antonio, Tex	10.4	19.1
Keokuk, Iowa	3.0	10.9
New Haven, Conn	5.1	16.2
Providence, R. I	8.8	19.8
Baton Rouge, La	11.5	21.5

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 28, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Bangor	17,000	1	8	24.5	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portland	34,000	4	14	21.5	4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	1	4	14.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	84	184	25.5	24	.....	53	10	3	.....	2	.....	5	.....	1	.....	1	75	10
Cambridge	50,400	7	15	15.6	2	.....	5	1	.....	.....	.....	.....	1	.....	.....	.....	.....	6	1
New Bedford	27,000	8	11	21.2	2	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	1
Newburyport	13,800	.....	6	22.6	2	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	3	5	35.8	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	16	26	27.7	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Plymouth	7,094	2	5	36.7	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lawrence	39,000	9	20	26.6	4	.....	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,000	11	21	18.8	7	.....	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2
Lowell	59,340	17	24	21.1	1	.....	12	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	12	1
Lynn	38,000	12	19	26.0	1	.....	6	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Brockton	13,600	6	10	38.3	1	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	6	10	23.7	1	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Milford	9,800	3	5	26.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	.....	2	9.5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,600	1	4	16.5	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Somerville	25,000	1	6	12.5	.....	.....	2	.....	1	.....	.....	.....	1	.....	.....	.....	.....	3	.....
Springfield	33,000	14	23	36.6	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	1
Bridgewater	3,700	.....	1	14.1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I. ..... Providence	104,862	12	29	14.4	4	.....	5	.....	.....	.....	2	.....	1	.....	.....	.....	.....	7	.....
Conn .... New Haven	63,000	6	24	19.8	8	.....	1	1	.....	2	.....	.....	5	.....	.....	.....	.....	4	2
Waterbury	20,200	2	4	10.3	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
New Britain	14,000	3	6	22.3	1	.....	3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Vt ..... Burlington	16,500	3	4	12.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3	.....
N. Y ..... New York	1,209,561	291	600	18.8	82	7	133	24	7	14	3	.....	66	2	6	.....	5	212	26
Brooklyn	564,448	159	292	26.9	30	4	69	19	.....	4	5	.....	22	2	2	.....	4	114	9
Yonkers	19,000	4	4	10.9	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	3	.....
Poughkeepsie	20,200	2	4	10.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburg	18,043	2	4	11.5	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Utica	34,000	8	17	26.0	4	.....	4	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Rochester	90,000	3	45	26.0	6	.....	10	.....	1	.....	.....	.....	4	1	.....	.....	.....	12	.....
Buffalo	155,159	28	53	17.8	7	.....	12	4	2	1	1	.....	2	.....	.....	.....	.....	20	2
Seneca Falls	6,000	1	3	26.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watertown	10,666	2	4	12.5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Jervis	10,000	1	5	26.0	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansingburg	7,150	.....	2	14.6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Little Falls	6,919	.....	2	15.1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	47	94	23.4	7	3	23	1	1	.....	3	.....	4	1	9	.....	.....	33	6
Newark	135,000	34	72	27.7	10	3	11	2	1	2	.....	.....	2	.....	.....	.....	.....	.....	2
Orange	13,213	2	7	27.5	2	....	1	.....	....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Camden	41,714	6	20	25.0	1	.....	2	1	.....	.....	.....	.....	.....	.....	.....	5	.....	7	.....
Plainfield	8,160	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	850,000	133	335	20.5	54	2	45	3	18	.....	3	.....	6	.....	1	5	.....	.....	6
Erie	28,565	5	8	14.6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Pittsburgh	156,649	34	73	24.3	2	.....	5	7	5	.....	4	.....	4	.....	1	.....	.....	17	4
Del ..... Wilmington	44,000	9	17	20.1	3	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	393,796	72	143	20.9	19	2	19	4	3	5	7	.....	.....	.....	.....	.....	5	41	7
District of Columbia	180,000	34	66	19.1	10	1	9	1	1	1	.....	.....	7	.....	2	.....	.....	20	2
Va ..... Norfolk	26,200	1	13	25.8	3	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	1
Richmond	64,670	14	27	21.7	1	.....	5	.....	.....	1	.....	.....	2	.....	1	.....	2	9	2
Lynchburg	16,400	1	5	15.9	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	5	6	17.7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ga ..... Savannah	33,248	10	25	39.2	3	.....	4	1	1	2	.....	.....	.....	.....	2	.....	1	.....	1
Augusta	27,012	5	13	25.0	3	.....	1	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....
Atlanta	38,000	6	16	21.9	5	.....	4	.....	2	.....	.....	.....	.....	1	.....	.....	.....	2	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	1	3	15.6	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fernandina	3,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	7	20	26.0	1	.....	3	.....	.....	2	.....	.....	.....	.....	1	.....	.....	5	2
Selma	7,505	3	5	34.8	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss .... Columbus	4,847	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	37	102	24.5	14	.....	16	2	.....	9	.....	.....	4	.....	1	.....	.....	.....	2
Shreveport	8,033	3	5	32.4	.....	.....	1	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....
Morgan City	2,018	.....	1	25.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Tex ..... Austin	16,000	.....	2	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Antonio	20,597	4	9	22.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brownsville	5,800	1	1	9.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waco	7,500	4	6	41.7	1	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ark ..... Little Rock	22,000	5	10	23.7	.....	.....	2	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	8	13	15.8	.....	.....	2	.....	1	1	1	.....	.....	.....	1	.....	.....	5	.....
Clarksville	7,250	1	1	7.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,800	1	1	13.7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	15	37	11.1	5	.....	3	.....	.....	1	2	.....	.....	.....	1	.....	.....	8	1
Ohio ..... Cincinnati	280,000	49	109	20.3	13	1	22	.....	.....	2	1	.....	5	.....	2	.....	4	46	3
Cleveland	175,000	.....	63	18.7	7	.....	20	1	.....	.....	3	.....	2	.....	1	.....	1	.....	2
Dayton	39,000	2	8	10.7	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....
Gallipolis	5,500	.....	1	9.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mich ... Lansing	10,000	2	3	15.6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Saginaw	19,000	6	7	19.1	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	11	24	16.6	4	.....	2	.....	2	1	.....	.....	2	.....	.....	.....	2	6	.....
Evansville	30,000	6	13	22.6	.....	.....	3	.....	5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richmond	13,000	2	4	16.5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Ill ..... Chicago	503,298	139	221	22.9	12	9	49	8	9	1	6	.....	10	1	2	.....	2	20	5
Peoria	34,850	3	6	9.0	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	3
Jacksonville	15,000	.....	3	10.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	1	1	5.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Aurora	12,050	1	2	8.6	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Wis ..... Milwaukee	116,000	43	63	27.7	2	.....	16	2	1	.....	.....	.....	1	.....	.....	.....	.....	21	4
Beloit	5,000	.....	1	10.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn .... Saint Paul	41,800	12	19	23.9	1	.....	4	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING AUGUST 28, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Iowa ....Dubuque	28,000	.....	4	7.4	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	15,800	1	3	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo .....Saint Louis	331,392	69	132	20.7	12	.....	12	1	6	11	.....	.....	1	.....	.....	.....	1	39	8
Kans ....Lawrence	8,500	.....	2	12.3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr ....Omaha	31,000	9	22	35.3	.....	.....	3	3	5	1	1	.....	2	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	2	5	10.4	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1
Cal .....San Francisco	233,700	31	83	18.5	12	.....	9	1	1	2	.....	.....	4	2	1	.....	1	13	3
Sacramento	21,500	.....	5	12.1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Los Angeles	11,000	1	4	18.9	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,664,360	1,631	3,490	21.0	423	33	681	104	84	79	48	.....	176	11	38	11	33	856	124

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING AUGUST 28, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	180	4	25.4	41.7
R. I .....Providence	100,862	4,000	28	1	14.5	13.0
Del .....Wilmington	38,000	6,000	12	5	13.3	43.5
Md .....Baltimore	338,334	55,412	105	38	16.2	35.8
District of Columbia	120,000	60,000	29	37	12.6	32.1
Va.....Norfolk	14,900	11,300	10	3	35.0	13.8
Richmond	37,970	26,700	12	15	13.4	29.5
N. C .....Wilmington	6,714	10,286	3	3	23.3	15.2
Ga .....Savannah	18,229	15,019	11	14	31.4	48.5
Atlanta	22,000	16,000	5	11	11.9	36.0
Augusta	16,182	10,830	4	9	12.9	42.1
Brunswick	1,500	1,400	0	0	.....	.....
Ala .....Mobile	28,000	12,000	7	13	13.0	56.6
Selma	3,425	4,080	4	4	60.9	51.1
Fla .....Jacksonville	6,000	4,000	2	1	17.4	13.0
Miss.....Columbus	2,500	2,347	.....	.....	.....	.....
La .....New Orleans	159,128	57,231	65	37	21.3	33.7
Shreveport	3,916	4,117	2	3	26.6	38.2
Tex.....Austin	12,000	4,000	2	.....	8.7	.....
Waco	5,000	2,500	4	2	41.7	41.7
Tenn ....Nashville	27,874	15,669	5	8	9.2	26.4
Clarksville	4,000	3,250	1	.....	13.0	.....
Murfreesboro'	2,000	1,800	.....	1	.....	29.0
Ky .....Louisville	153,125	21,875	32	5	10.9	12.3
Totals	1,491,659	354,816	523	214	18.3	31.5

The following reports for the week ending August 28 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 4; under 5 years, 1; diphtheria 1. Allegheny, Pa., 78,000; deaths, 17; under 5 years, 11; consumption 1, diarrhœa 4, diphtheria 2, pneumonia 1, whooping cough 1. Battle Creek, Mich., 7,500; one death, under 5 years, cholera infantum. Belfast, Me., 5,308; deaths, 3; consumption 1, diarrhœa 2. Boulder, Colo., 3,030; deaths, 3; under 5 years, 1; diarrhœa 1, enteric fever 1. Brattleborough, Vt., 6,000; consumption 1. Calais, Me., 6,162; diphtheria 1. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 6,400; one death. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths for two weeks. Cumberland, Md., 10,667; diarrhœa 1, under 5 years. Dallas, Tex., 10,300; deaths, 6; under 5 years, 2; diarrhœa 1, enteric fever 2. Davenport, Iowa, 23,000; deaths, 4; under 5 years, 1; scarlet fever 2, pneumonia 1, puerperal 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Franklin, Ind., 2,700; deaths, 2; puerperal 1. Helena, Mont., 3,630; one death. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., 1,200; no deaths. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; no deaths. Kenosha, Wis., 5,500; deaths, 3; under 5 years, 2; diarrhœa 2, old age 1. Lebanon, Pa., 9,000; deaths, 5; under 5 years, 1; croup 1, enteric fever 2, puerperal 1. Madison, Ind., 9,009; deaths, 5; under 5 years, 2; scarlet fever 3. Meridian, Miss., 4,013; one death, old age. Milledgeville, Ga., 3,000; deaths, 2; malarial fever 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 2. Muscatine, Iowa, 8,412; scarlet fever 1. Muskegon, Mich., 11,300; deaths, 7; under 5 years, 3; consumption 2, croup 1, diarrhœa 1, malarial fever 1. Natchez, Miss., 7,000; deaths, 3; under 5 years. Niles, Mich., 4,200; consumption 1. Ocala, Fla., 1,000; no deaths. Okolona, Miss., 2,000; no deaths. Oshkosh, Wis., 17,030; deaths, 8; under 5 years, 6; diarrhœa 5, pneumonia 1, old age 1. Painesville, Ohio, 5,500; no deaths. Pass Christian, Miss., 4,000; one death. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; deaths, 2; under 5 years, 1; enteric fever 1, malarial fever 1. Port Royal, S. C., 750; no deaths. Portsmouth, Ohio, 11,320; deaths, 4; diarrhœa 1, old age 1. Rensselaer, Ind., 900; no deaths. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., 12,000; deaths, 3; under 5 years, 2; diarrhœa 1, enteric fever 1. Rockland, Me., 7,500; deaths, 3; under 5 years 2; diarrhœa 2. Santa Cruz, Cal., 5,000; old age 1. Springfield, Ohio, 21,000; deaths, 8; under 5 years, 2; consumption 2, puerperal 1. Starkville, Miss., 1,454; one death, under 5 years. Steubenville, Ohio, 13,500; deaths, 4; under 5 years, 1. Summit, Miss., 1,807; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; old age 1. Verona, Miss., 1,000; diarrhœa 1, under 5 years. Wesson, Miss., 2,000; no deaths in three weeks. Winchester, Va., 5,000; no deaths. Winona, Minn., 10,000; consumption 2. Youngstown, Ohio, 15,089; deaths, 5; under 5 years, 4; diarrhœa 2, pneumonia 1, whooping cough 1. Total population, 406,465; deaths under 5 years, 49; total number of deaths, 119; annual rate per 1,000, 15.2.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to hav the white and colored populations given separately.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				[illegible]				[illegible]				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	90	1	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	2	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	10	1	92
Albany Hospital	Albany, N. Y	do	125	55	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	1	54
State Emigrant Hospital	Ward's Island, N. Y	do	461	27	..	1	..	7	..	..	..	..	3	1	1	11	..	..	..	..	..	..	..	..	4	4	..	7	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	8	7	1	27
Hart's Island Hospital	Hart's Island, N. Y	do	300	224	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	15	1	224
German Hospital	New York, N. Y	do	90	72	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	4	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	16	1	75
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	6
Rochester City Hospital	Rochester, N. Y	do	125	66	2	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	2	..	74
Saint Mary's Hospital	do	do	320	225	..	..	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	6	2	223
Saint Barnabas Hospital	Newark, N. J	do	40	23	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	..	..
Saint Michael's Hospital	do	do	140	138	1	..	..	13	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	4	5	5	..	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26	16	1	147
Germantown Hospital	Germantown, Pa	do	25	16	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	..	16
Jewish Hospital	Philadelphia, Pa	do	40	26	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	5	..	29
Saint Mary's Hospital	do	do	80	25	..	1	..	6	..	..	..	..	1	..	..	5	..	..	..	..	2	1	..	7	1	2	..	3	..	..	..	1	..	2	..	..	..	..	1	..	..	..	..	6	4	2	25
Homœopathic Hospital	Pittsburgh, Pa	do	40	25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	9	..	19
Saint Franciscus Hospital	do	do	..	63	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
Freedmen's Hospital	Washington, D. C	do	300	250	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	19	3	236
Providence Hospital	do	do	160	116	2	3	..	21	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	3	5	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	26	2	110
Freedmen's Hospital	Augusta, Ga	do	50	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	2	..	15
Georgia Infirmary	Savannah, Ga	do	50	39	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	4	1	36
Saint Mary's Hospital	Galveston, Tex	do	300	89	2	2	..	9	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	10	8	1	13	..	..	..	..	2	1	..	2	..	..	..	..	..	..	..	..	27	23	1	92
Cincinnati Hospital	Cincinnati, Ohio	do	500	304	12	2	2	8	..	..	..	..	1	3	..	5	..	..	..	..	2	2	..	14	3	9	..	6	..	..	..	..	..	2	..	1	3	..	5	..	..	..	..	..	71	64	8	307
Saint Luke's Hospital	Detroit, Mich	do	25	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	12
Alexian Brothers' Hospital	Chicago, Ill	do	70	68	3	1	1	8	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	2	1	5	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	12	12	1	67
City Hospital	Saint Louis, Mo	do	411	253	4	2	3	22	..	..	..	..	10	7	2	29	..	..	..	..	..	..	..	..	30	13	2	43	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	..	89	61	9	272
Saint John's Hospital	do	do	..	19	2	1	..	2	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	3	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2	1	21
Saint Louis Hospital	do	do	250	69	..	1	..	4	..	..	..	..	2	3	..	4	..	..	..	..	..	..	..	..	6	5	..	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	15	..	..
Naval Hospital	Chelsea, Mass	do	100	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	22
Do	Brooklyn, N. Y	do	115	35	..	..	..	4	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	4	..	..	..	..	..	..	..	..	2	1	1	..
Do	Washington, D. C	do	50	8	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
Do	Pensacola, Fla	do	20	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Do	Mare Island, Cal	do	77	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
Riverside Hospital	New York, N. Y	Contagious diseases	150	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	6
Municipal Hospital	Philadelphia, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35	5	1	29
State Hospital for Women and Children	do	Women and children	18	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	..	10
Children's Hospital	Washington, D. C	Children	72	41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2	..	44
Women's Hospital of Illinois	Chicago, Ill	Women	19	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	11
Insane Hospital	Augusta, Me	Insane	400	423	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	423
New Hampshire Asylum	Concord, N. H	do	300	294	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	6	1	290
State Lunatic Hospital	Worcester, Mass	do	650	543	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	542
Retreat for Insane	Hartford, Conn	do	150	148	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	148
Hospital for Insane	Middletown, Conn	do	517	516	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	516
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	..	1278	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	1	..	1292
Hudson River State Hospital	Poughkeepsie, N. Y	do	..	241	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	242
Marshall Infirmary	Troy, N. Y	do	200	131	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3	..	136
Willard Asylum	Willard, N. Y	do	..	1603	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	1604
State Hospital for Insane	Danville, Pa	do	700	478	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	57	..	423
West Pennsylvania Hospital for Insane	Dixmont, Pa	do	500	589	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	5	2	589
Eastern Lunatic Asylum	Williamsburg, Va	do	356	333	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	334
th Carolina Insane Asylum	Raleigh, N. C	do	..	278	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	277
bama Insane Hospital	Tuscaloosa, Ala	do	420	409	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	406
e Lunatic Asylum	Austin, Tex	do	..	361	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	..	364
gview Asylum	Carthage, Ohio	do	..	670	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	9	2	660
higan Asylum	Kalamazoo, Mich	do	660	654	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	1	654
nesota Hospital for Insane	Saint Peter, Minn	do	..	668	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	3	1	670
nsane Asylum	Saint Louis, Mo	do	..	342	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	3	1	344
Insane Asylum of California	Stockton, Cal	do	1112	1110	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	1	2	1112

REPORT OF QUARANTINE INSPECTIONS AND OPERATIONS FOR MONTH ENDING AUGUST 31, 1880.

ARRIVED DURING THE MONTH.

Station.	Name of vessel.	Description of vessel.	Name of commander.	Where from.	Days of passage.	Date of arrival.	No. of crew.	No. of passengers.	Cargo.	Bill of health.	Sanitary condition of vessel.	Disposition of vessel, and remarks.
New Bedford, Mass.	Bogota	Brig	Azevedo	Flores	32	Aug. 18	10	150	Oil and iron	Clean	Good	Free pratique.
Do	Veronica	Bark	Hathaway	Madeira	35	Aug. 19	15	19	Wines	do	do	Do.
Philadelphia, Pa	Sandvich	do	C. J. Hugstrum	Rio Janeiro	46	Aug. 7			Ballast		Medium	Detained for fumigation, &c.; released August 9.
Do	Lizzie Littlosen	Brig	John Jessen	St. Jago de Cuba	22	Aug. 7			Sugar		do	Do.
Do	Jafnhar	Bark	John Olsen	Rio Janeiro	52	Aug. 9	11	1	Stone ballast		do	Detained on account of losing 1 man on passage; released August 11.
Norfolk Va	Giles Loring	Brig	Kenney	Orchila Island via Philadelphia.	53	Aug. 19	8		Ballast	Clean	Good	Free pratique.
Do	S. D. Barnes	Schooner	Bush	Cat Island	7	Aug. 6	6	2	Fruit	do	do	Do.
Do	Hadji	Steamer	Faircloth	Porto Rico	8	Aug. 16	30	5	Sugar	do	do	Do.
Do	Vidal Sala	do	Ojinaga	Havana	5	Aug. 19	42	54	do	Clean as to vessel.	Fair	Anchored 48 hours 1 mile below city.
Mobile, Ala	Linda	Schooner	Wm. J. Boyd	Kingston	11	Aug. 17	9	1	Ballast	Clean	Good	Quarantined; released August 21.
Do	A. G. Shortland	do	Herrick	Guadeloupe	15	Aug. 21			None	Foul	do	Quarantined; released August 29.
Do	Aberdeen	Bark	Conk	Puerto Cabello	18	Aug. 28	8	2	Stone ballast	Clean	do	Quarantined.
Pensacola, Fla	Demokrat	Schooner	P. Matteo	Mobile	4	Aug. 3	2		Melons	None	do	Free pratique.
Do	L. T. Whitmore	do	G. A. Campbell	Galveston	6	Aug. 3	8	1	None	Clean	do	Do.
Do	Macedon	Bark	R. A. J. Klemforth	Rio	38	Aug. 4	20		Ballast	Not clean	do	Quarantined; released August 14.
Do	Walter Denny	Schooner	W. Whittiker	New Orleans	6	Aug. 5	6		Merchandise	Clean	do	Free pratique.
Do	Palo Alto	Bark	Th. Griffin	Aspinwall	19	Aug. 6	11		Ballast	do	Not good	Quarantined; released August 16.
Do	E. T. Hart	Schooner	P. Rivers	Boston	26	Aug. 6	7		None	None	Good	Free pratique.
Do	Island Home	Bark	J. McLinley	Greenock	53	Aug. 11	16		Ballast	do	do	Do.
Do	Angioline	do	G. Scotte	Cape Town	61	Aug. 12	13		do	do	do	Partly discharged ballast; released August 14.
Do	Dorothey	do	D. Wright	Montevideo	42	Aug. 12	17		do	Clean	do	Quarantined; released August 17.
Do	Albert Ross	Schooner	J. Dellens	Cedar Keys		Aug. 14	2	8	None	None	do	Free pratique.
Do	Abbey Clifford	Brig	D. W. Storer	Rockport	36	Aug. 16	8		Ice and hay	do	do	Do.
Do	Biancha Ginnocchio	Bark	V. Dinegri	Santos	75	Aug. 17	11		Ballast	Not clean	Not good	Quarantined; released August 27.
Do	Emilia	Brig	J. Abad	Matanzas	7	Aug. 18	10		do	do	do	Quarantined; released August 25.
Do	Philip Fitzpatrick	Bark	Wm. Phelan	Key West	3	Aug. 18	10		do	Clean	Good	Free pratique.
Do	Ajax	Schooner	W. H. Northrup	Indianola	18	Aug. 22	9	1	None	None	do	Do.
Do	Ella Woods	Steamer	Wm. Smalden	Cedar Keys	3	Aug. 24	7		do	do	do	Do.
Do	W. A. Watson	Schooner	E. de Vig	Indianola	21	Aug. 25	4	1	Horses	do	do	Do.
Do	Vineyard	do	E. C. Rosebrook	Galveston	16	Aug. 26	6		None	Clean	do	Do.
Ship Island, Miss	Petit Bourgeois	French bark	G. A. Palvadeau	Savannah la Mar, Jamaica.	15	Aug. 8	16		Sand ballast	do	do	Do.
Do	Maria Eliza	Spanish brig'tine	Luis Vida	Cienfuegos, Cuba	13	Aug. 8	8		do	do	do	Detained for observation, &c.
Do	Tomasita	do	Edwd. Sevilla	Havana	5	Aug. 12	12		Stone ballast	Clean, Spanish.	Fair	Do.
Do	Theresa C	Amer. schooner	W. N. Jorgensen	do	4	Aug. 19	4	1	None	Clean	do	Do.
Bagdad, Mexico	City of Mexico	Steamer	J. McIntosh	New Orleans	3	Aug. 9	47	11	General merchandise.	do	Good	Allowed to proceed.
Do	do	do	do	Vera Cruz	4	Aug. 20	46	29	Coffee, sugar, &c.	do	do	Do.
Do	Velos Maria	Bark	Angelino Pachini	Tampico	3	Aug. 23	3	4	do	do	do	Quarantined for 60 hours.

REMAINING IN QUARANTINE AT DATE OF LAST REPORT.

Station.	Name of vessel.	Description of vessel.	Date when placed in quarantine.	Disposition of vessel, and remarks.
Mobile, Ala	R. W. Wood	Bark	July 25	Has received 1 fumigation. To discharge ballast and receive another.
Ship Island	Maria Eliza	Brigantine	August 8	Awaiting permit from custom-house authorities to discharge ballast.
Do	Tomasita	do	August 12	Do.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Aug. 21	3	31.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
Canada	Montreal	135,000	Aug. 28	81	31.3	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	7	67
Cuba	Havana	195,437	Aug. 21	199	53.1	.....	.....	.....	36	.....	3	.....	5	.....	.....	.....	.....	83
Trinidad	Spain	30,000	July 10	42	73.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	30,000	July 31	24	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	Matamoros	16,000	Aug. 21	13	42.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Helena	Jamestown	6,241	July 24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.6
Do	...do	6,241	July 31	2	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73.8
Do	...do	6,241	Aug. 7	1	8.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
Ireland	Queenstown	10,000	Aug. 21	10	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland	Glasgow	589,598	Aug. 14	227	20.1	.....	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	28	63.4
Do	Leith	58,479	Aug. 7	27	24.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	62.4
Do	...do	58,479	Aug. 14	23	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....
Do	Dundee	155,100	Aug. 21	56	18.5	.....	.....	.....	.....	.....	.....	1	.....	1	1	6	.....	63.9
England	London	3,664,169	Aug. 14	1,670	23.8	.....	.....	.....	.....	.....	6	.....	16	.....	.....	.....	136	.....
Do	Bristol and Clifton	213,500	Aug. 21	109	26.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	.....
Do	Sheffield	304,938	Aug. 7	139	24.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
Do	...do	304,938	Aug. 14	170	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57.4
Do	Tunstall	171,826	Aug. 7	82	24.8	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	4	24.8
Do	Liverpool	544,056	Aug. 14	308	29.5	.....	.....	.....	.....	.....	.....	3	2	15	1	28	28	62.4
Do	Bradford	197,196	Aug. 21	64	16.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....
Do	...do	197,196	Aug. 14	87	23.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....
Do	Newcastle	148,000	Aug. 14	52	18.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	61
Do	...do	148,000	Aug. 21	68	23.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	65
Wales	Cardiff	82,364	Aug. 14	35	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....
France	Lyons	342,815	Aug. 7	184	27.6	.....	.....	.....	.....	.....	6	.....	4	.....	.....	.....	11	.....
Do	Havre	92,068	Aug. 7	92	52.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
Do	...do	92,068	Aug. 14	91	51.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
Do	Rouen	104,902	Aug. 21	52	25.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Zurich	22,103	Aug. 14	9	21.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	Aug. 7	134	22.0	.....	.....	.....	.....	2	.....	.....	2	.....	.....	.....	4	65
Do	...do	316,952	Aug. 14	151	24.9	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	1	67
Do	Rotterdam	150,378	Aug. 21	64	22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....
Germany	Berlin	1,096,644	Aug. 7	722	34.2	.....	.....	.....	.....	.....	.....	39	11	2	.....	160	53	63
Do	Breslau	276,000	Aug. 7	204	38.6	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	41	61
Do	Brunswick	74,000	Aug. 14	49	34.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....
Do	Bremen	109,000	Aug. 7	51	24.4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	1	.....
Do	Barmen	95,000	Aug. 7	47	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	65
Do	...do	95,000	Aug. 14	53	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	4	58
Do	Cologne	141,639	Aug. 14	88	32.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....
Do	Mannheim	50,500	Aug. 21	20	20.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
Do	Nuremberg	100,000	Aug. 7	42	21.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
Saxony	Chemnitz	92,137	Aug. 7	85	48.3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	3	64
Do	Leipsic	150,836	Aug. 7	54	18.6	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	61
Do	...do	150,836	Aug. 14	90	31.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	62
Do	Dresden	220,500	Aug. 7	125	29.6	.....	.....	.....	.....	.....	.....	1	1	.....	.....	6	6	60
Belgium	Antwerp	173,643	Aug. 14	125	37.6	.....	.....	.....	.....	44	14	14	.....	.....	.....	.....	1	.....
Do	...do	173,643	Aug. 21	106	31.8	.....	.....	.....	.....	33	13	12	1	.....	.....	1	1	.....
Italy	Genoa	183,000	Aug. 21	104	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
Hungary	Buda-Pesth	344,604	July 31	277	41.9	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	4	.....
Do	...do	344,614	Aug. 7	271	41.0	.....	.....	.....	.....	.....	5	.....	2	.....	.....	.....	2	.....
Russian Poland	Warsaw	357,169	Aug. 7	266	38.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	64
Sweden	Stockholm	169,429	Aug. 7	82	26.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	11	62
Norway	Christiana	116,801	Aug. 7	63	28.1	.....	.....	.....	.....	1	1	2	1	.....	.....	3	3	63
Portugal	Oporto	108,346	July 24	77	37.0	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	67
Do	Lisbon	225,152	June 5	111	25.7	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	65
Spain	Alicante	34,926	Aug. 11	21	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Cadiz	65,028	Aug. 14	39	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	Carthagena	76,000	Aug. 8	47	32.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	...do	76,000	Aug. 15	44	30.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Barbary	Tripoli	20,000	Aug. 7	11	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91.5
Do	...do	20,000	Aug. 14	7	18.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	89.2
Egypt	Alexandria	220,000	Aug. 14	168	39.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Colony	Cape Town	35,000	Aug. 3	14	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
India	Bombay	644,405	July 13	373	28.0	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	10	81.1
Do	...do	644,405	July 20	363	29.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	81.1
Do	Calcutta	429,535	July 17	179	21.7	.....	5	.....	.....	.....	.....	.....	11	.....	1	.....	1	83.1
Do	...do	429,535	July 24	161	19.5	.....	1	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	84.5
China	Shanghai	2,000	July 3	1	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74.7
Do	...do	2,000	July 13	1	26.1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	80.1
Do	...do	2,000	July 20	2	52.2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....

National Board of Health

BULLETIN.

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AN ABSTRACT OF ALL THE QUARANTINE LAWS, ETC., OF THE STATE OF SOUTH CAROLINA.

[By R. LEBBY, M. D., health officer of the port of Charleston.]

By act of October 8, 1698.

All vessels are forbidden to pass to the *west of Sulivan's Island one mile* without permission of the governor, under penalty of being fired on by the gunner, and paying a fine. The pilot is required to ascertain from the captain, before passing that limit, if any contagious disorders are on board, under penalty of £50. This act was of force two years.

June 7, 1712.

Gilbert Guttery was appointed health officer for the province to inquire "into the state of health of all persons as shall arrive on board ship." He was to go on board all vessels as soon as they crossed the bar, and make these inquiries; also, concerning the deaths on the passage; search the ship, and order all the men on deck for that purpose. He was empowered to administer oaths to captain and crew touching this law, and, upon cause, to send persons to the pest-house on Sulivan's Island, to have the vessel fumigated, and to detain her for twenty days without communication, except with Sulivan's Island. The diseases then specified were "the plague, small-pox, spotted fever, Siam distemper, Guinea fever," &c. The penalty was £100. The pilot must wash himself and his clothes, before coming ashore, after being on board of any vessel arriving from south of 30° N. L., under penalty of £20. No person shall visit such ship before the commissioner posted his public certificate, under penalty of £100, or being whipped through the public streets. Nor shall the captain send a boat ashore before said certificate, under penalty of £50, together with a forfeiture of all negroes and other goods he may put ashore. No person should leave the pest-house without permission, under penalty of £30. The commissioner shall allow no one but himself to go aboard, and he must cleanse himself before his return ashore. The commissioner has full charge of the pest-house, furnishing nurse, repairs, conveniences, to the value of £15 *per annum*. Persons in the pest-house must maintain themselves, the commissioner causing the provisions to be carried there at market prices. The commissioner's salary to be £40. This act was of force for two years, and was confined to the port of Charleston—other ports being left to the discretion of the governor.

September 1, 1721.

The same provisions as the act of 1712, except the pilot "shall (wind and tide permitting) bring the said ship above Johnson's Fort, so that she may be under the command of the guns of the said fort." That the captain, or the doctor, or officer and sailor shall apply to the commandant of said fort, and answer whether "the place from whence he came is healthy"; whether "his ship's company is in health"; or "died on the voyage"; "from what distempers"; and "how long since." The commandant may permit him to pass, but he must then apply to the governor, who being satisfied, the ship shall be "permitted to enter and trade." If the commandant or governor is not satisfied, the ship shall be removed to a place, by them designated, for quarantine. The consignee may furnish provisions to his vessel under the direction of the governor; but no one shall go on board without his permission, or his boat shall be confiscated. In case of a hurricane, the quarantined ship may seek safety up the river. The provisions of this act extend to any other port in the province.

Act of September 18, 1738.

The Spanish in Havannah and St. Augustine being about to invade the province, and there being fear of the spreading of small-pox, no person having small-pox shall come within two miles of Charleston, or be inoculated within that limit, under penalty of £500. The justices of the peace shall remove infected persons outside of the limits and guard their houses. Persons refusing to assist the justice to be fined £20. All infected houses in the country shall be advertised on the public road and at the church; and a white rag tied to the gate of the house or plantation, under penalty of £50. The justices are charged with cleansing infected places. The act of force one year.

May 29, 1744.

One thousand pounds appropriated for Sulivan's Island pest-house. No ship with negroes from Africa shall pass to town without the negroes staying 10 days at the pest-house, or carried on shore 5 out of 10 days for purification, upon pain of confiscation. No one from shore shall go on board said ship; and no one leave said ship under penalty of whipping. The captain upon passing Fort Johnson shall swear conformity. The act was of force for three years.

January 13, 1747.

The form of pilot's oath, when receiving his branch, that he will make inquiries for contagious diseases, is enacted. Pilot shall receive ten shillings *per diem*, while at quarantine, unless captain informed him before he went aboard. No one to leave the vessel without a pass. No vessel coming from any part of America where the commander of Fort Johnson has heard there is "plague, malignant fever, small-pox, or any other contagious distemper," shall be permitted to pass Fort Johnson, if the officer of the vessel refuses to swear, unless with the consent of one of the doctors signing, date, Moultrie, Martine, Caw, and Rind. Their fee for visiting vessel, £7 10*s*., and boat hire. The commandant at Fort Johnson shall signal for the doctor.

April 13, 1756.

The act of June 13, 1747, renewed for one year.

April 7, 1759.

The pilot's oath of 1747 re-enacted; and the foregoing provisions for quarantine renewed. In any other port than Charleston under the guns of any fort is substituted for "Fort Johnson." No vessel with more than thirty whites or ten blacks shall approach the city without staying 10 days at pest-house or on the beach of Sulivan's Island, except by leave of the doctors, who must not give permission before the ninth day. Persons going on board a vessel at quarantine must stay until her time is out, and forfeit their boat and £50, or suffer corporal punishment. Pilot to be paid 20 shillings per diem for detention at quarantine, unless he was informed of the sickness, or omitted to comply with his oath as to questions. This act applies to all ports of entry. The public treasurer must sue in a *qui tam* action for all penalties; in which the general issue may be pleaded. This act of force for five years.

May 30, 1760.

Act of 1738 re-enacted, in effect. The commissioners to be at the State-house, Charleston, from 9 to 12 m., to receive a list of the infected, which all the inhabitants are charged to bring to them, and publish their names, and where they are, in the Gazette.

March 26, 1784.

Act of 7th April, 1759, repealed. No pilot shall bring in a vessel before examination under penalty of £100. That the commanding officers of forts in the various harbors cause the captains to answer on oath the questions in act of 1712. If not satisfactory, the vessel is stopped until the pleasure of the governor is known, and the vessel is made to perform such quarantine as may be deemed proper. No person to go on board or on shore without permission. The pilot's fee is a guinea per diem. Vessels from the Mediterranean must perform quarantine, unless they have a proper bill of health, setting forth number of persons on board, and their condition of health at the time of leaving port. The crew may be ordered to leave the State or do quarantine for 40 days in the discretion of the governor. Pest-houses and warehouses to be erected on Sulivan's Island; and a small fort to be erected in each other harbor, for the purposes of this act. The commandant at Fort Johnson shall hold this appointment. Woolen or cotton cargoes shall be taken to the warehouses to be aired. Penalty of captain or doctor, £1,000 for violations.

March 17, 1785.

The 40 days' quarantine for Mediterranean vessels repealed and made discretionary with the governor.

December 19, 1796.

The power of governor concerning quarantine vested in the city council of Charleston (when the governor is absent from the city), and in the commissioners of streets of Beaufort and Georgetown. The city council to sell the lazaretto on Sullivan's Island or rent out the same, raise a tax on the lot holders of $13, and remove the house to some other place (on the island).

December 16, 1797.

The governor may hire boats and men to enforce the quarantine regulations, and arm them if necessary.

December 19, 1809.

The quarantine officers may board, by force of arms, any vessel, and detain crew and passengers, who may violate quarantine—the penalty of the latter is from $100 to $2,000 fine. A pilot shall lose his branch for violating quarantine law as well as be fined. Any vessel violating quarantine laws may be fired into.

December 20, 1832.

Authorizes the city council of Charleston, and the intendant and wardens of Beaufort and Georgetown, to regulate quarantine. Their orders to be published in two newspapers of Charleston. They shall have infected vessels cleansed at the expense of owners. These regulations to extend 20 miles from Charleston, Georgetown, or Beaufort for wrecked vessels. Infected vessels shall depart the State upon notice; besides, fines and imprisonment of 12 months for violations is imposed. Vessels violating quarantine may be fired on. Pilot bringing vessels beyond the limits to be fined £100 and lose his branch.

December 21, 1839.

No more cellars in Charleston or in villages within 20 miles from coast to be dug under penalty of $500 to $1,000.

December 19, 1849.

Interments in Charleston to be permited with a certificate of the disease.

January 28, 1861.

No one permitted to enter or pass the quarantine line except by permission of governor or mayor, under penalty of 1 year imprisonment, and not exceeding $2,000 fine.

September 26, 1868.

Quarantine grounds at Charleston, Georgetown, and Hilton Head to be designated by buoys. Vessels coming from infected ports to be quarantined at least (4th sec. 1st clause) 30 days after arrival and 20 days after discharge of cargo, when she arrives between 1st May and 1st November, or, 2d, any place in Asia, Africa, or the Mediterranean or the West Indies, Bahama, Bermuda, or Western Islands, or American port south of Hilton Head. They shall be visited by the health officers, and detained only so long as is necessary to ascertain condition of health. Steam vessels shall be at the discretion of the health officer. Vessels at quarantine on 1st November are subject to regulations of those arriving after that day. Vessels may, after going to the wharves, be quarantined, ordered off, &c. The master must deliver to the mayor or intendant within 24 hours the permit of the health officer, after his vessel has been quarantined. She may go to sea without breaking bulk. Pilots must make inquiries concerning health, and anchor vessels accordingly within quarantine buoys; prevent communication by boat or person; furnish a copy of this act to the captain; report all violations of the act; and subject themselves to such delay and cleansing as the health officer may direct. The health officer must board vessels subject to quarantine between sunrise and sunset, and inquire of the health, condition of vessel, and cargo; inspect bill of health, &c.; examine on oath witnesses; and report facts and conclusions, especially number of sick, nature of disease, &c., to the mayor. He must reside within or near quarantine ground; he has power to remove any dangerous vessel south and east of quarantine ground; to purify vessel; discharge or land cargo (or destroy it with the concurrence of the mayor); to prevent persons leaving until 15 days after the last case of disease and 10 days after arrival; to vaccinate all persons at quarantine; to administer an oath; he may order the sheriff, &c., to arrest and confine at quarantine for 10 days. A quarantined vessel to be designated by colors in the main shrouds. No boat or lighter to pass through quarantine ground without permission. The master shall provide for all on board, or health officer shall do so, at expense of vessel; and vessel shall not leave until the debt is secured. The health officer may confine a prisoner on shore during the quarantine. An appeal lies to the governor, attorney-general, comptroller-general, as a board of appeal from health officer, in writing, within 12 hours from order. In 12 hours after notice health officer must make his return in writing to the governor, who shall call the board, for a hearing, in 24 hours; and until discussion the order is suspended, except for detentions, &c. The health officer may employ parties to do his orders on vessels, and their compensation shall be a lien on the vessel. Fine, $100 to $500; imprisonment, 3 to 6 months.

The governor may issue his proclamation declaratory of any infected port; shall limit the time, and may extend the time. Vessels coming from such ports subject to quarantine. Masters violating quarantine subject to penalty not exceeding $2,000 and 12 months imprisonment, or both.

There shall be one health officer at Charleston, one at Georgetown, and one at Hilton Head, who shall hold office for the term of two years, with salary of $1,200 (Charleston, $1,500) and $15 per month for boat hire. They shall keep a faithful record and report the same to the governor monthly. The governor shall pay for quarantine guard out of State funds. All violations shall be tried in the court of sessions.

March 9, 1869.

The health officers must be graduates of medical schools. Vessels arriving after November 1 with small-pox, cholera, typhus or infectious or contagious diseases, or from any foreign ports having passengers, shall be anchored at quarantine ground and be visited by health officer and subject to his regulations.

March 19, 1869.

Governor and health officer to have a lazaretto constructed on Morris Island. The health officer shall be stationed at Fort Johnson or on Sullivan's Island, and buildings shall be erected for his accommodation. $8,000 appropriated.

February 7, 1875.

The act of 1868 amended by striking out "thirty" and inserting "fifteen days" in 4th section 1st clause, and "at least 20 days after their cargo has been discharged"; and 2d clause "any place south of Hilton Head."

December 23, 1878.

A State board of health created, consisting of S. S. Marshall, president; F. L. Parker, J. B. Dubose, J. J. Horton, vice-presidents; H. D. Fraser, corresponding secretary; A. S. Hydrick, recording secretary, and T. Grange Simmons, treasurer, with the Attorney-General and Comptroller-General and their associates and successors. They are to be the sole advisers of the State concerning health, and make annual reports to the legislature. Every seven years an executive committee is to be appointed by the governor, upon the recommendation of the association, who may be removable by him, and he may fill vacancies. They shall elect a chairman and a secretary; the latter shall be "registrar general." They may divide the State into health districts and appoint subboards of health of two physicians and one layman. They shall investigate causes of disease, influence of climate, occupation, drainage, &c., and inspect annually, at least, all public institutions. The State board shall supervise quarantine and establish the same with the advice and consent of the governor. They shall recommend laws for registration of statistics. $2,000 appropriated for this purpose.

December 23, 1879.

Quarantine anchorage at Port Royal, one mile below or south of Johnson's or Saint Helena River. A site shall be purchased and buildings erected, by three commissioners appointed by governor, for $5,000, and the act of 1875 amended so as to include vessels on a passage south of Capes Hatteras, Henlopen, or Fear.

N. B. The following acts of the general assembly were formally repealed in the act of 1870, generally known as the General Statutes, to wit: 1712, 1721, 1744, 1759, 1784, 1785, 1796, 1797, 1760, 1832, 1839.

NOTICE.—After August 28, the reports from hospitals in the United States will be published every four weeks in a table giving the totals for that period. Only those hospitals sending reports for the four weeks will be represented in the table.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
	1880.																			
Providence, R. I	July	104,862	111	207	23.7	28	.....	67	6	1	.....	13	.....	5	1	1	.....	3	.....	3
Do	August	104,862	78	174	19.8	25	.....	35	5	2	.....	12	.....	11	1	.....	.....	1	.....	4
New Haven, Conn	July	63,000	68	131	24.9	19	1	38	1	1	4	.....	.....	3	.....	2	.....	1	48	.....
Do	August	63,000	27	85	16.2	12	.....	12	2	2	3	.....	.....	1	.....	.....	.....	.....	12	.....
Stamford, Conn	April	12,000	3	17	17.0	2	.....	.....	.....	.....	1	.....	.....	8	.....	.....	.....	.....	.....	.....
Do	May	12,000	.....	11	11.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Do	June	12,000	1	5	5.0	.....	.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Do	July	12,000	9	17	17.0	3	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington, Vt	June	16,500	6	19	13.9	5	1	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1
Amsterdam, N. Y	July	9,360	16	24	30.8	2	.....	8	1	.....	.....	1	.....	1	.....	1	.....	.....	13	1
Dunkirk, N. Y	do	8,000	3	6	9.0	.....	.....	.....	1	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Elmira, N. Y	do	20,988	24	38	21.7	2	.....	17	1	2	.....	.....	.....	4	1	.....	.....	.....	21	.....
Geneva, N. Y	May	6,150	1	8	15.6	1	.....	.....	2	1	1	.....	.....	2	1	.....	.....	.....	.....	.....
Do	June	6,150	1	7	13.7	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Kingston, N. Y	August	28,000	4	10	42.9	1	.....	2	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	1
Little Falls, N. Y	July	6,910	2	7	12.2	2	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Do	August	6,910	5	12	20.8	.....	.....	3	.....	2	1	.....	.....	1	.....	.....	.....	.....	3	2
Syracuse, N. Y	July	55,000	34	78	17.0	13	3	19	2	.....	3	2	.....	3	.....	.....	.....	.....	.....	.....
Troy, N. Y	May	57,000	45	136	28.6	43	7	19	8	.....	6	7	.....	7	.....	4	1	2	.....	4
Do	June	57,000	61	135	28.4	35	6	32	8	.....	4	7	.....	6	.....	2	.....	1	.....	6
Do	July	57,000	75	147	30.9	33	6	52	2	.....	4	6	.....	.....	.....	3	.....	.....	.....	9
Elizabeth, N. J	August	28,000	.....	53	22.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paterson, N. J	July	50,950	65	124	29.2	12	2	38	3	.....	.....	.....	.....	7	.....	1	.....	.....	.....	2
Vineland, N. J	do	8,000	7	8	12.0	1	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Do	August	8,000	3	8	12.0	1	.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Scranton, Pa	July	40,000	17	36	10.8	5	1	8	.....	1	.....	5	.....	5	.....	.....	.....	.....	15	1
District of Columbia	June	170,000	270	459	32.4	57	1	111	4	6	12	.....	.....	26	.....	.....	.....	4	159	8
Norfolk, Va	July	26,200	37	73	33.4	4	.....	11	8	2	7	2	.....	6	1	.....	.....	.....	36	3
Petersburg, Va	August	22,000	20	52	28.3	6	.....	14	.....	2	2	.....	.....	3	.....	.....	.....	.....	.....	1
Mobile, Ala	January	40,000	10	45	13.5	10	.....	1	1	2	.....	.....	.....	3	.....	.....	.....	.....	5	.....
Do	February	40,000	14	60	18.0	8	.....	3	.....	.....	1	.....	.....	6	.....	.....	.....	.....	6	1
Do	March	40,000	4	36	10.8	10	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	3	.....
Do	April	40,000	11	58	17.4	12	.....	1	.....	.....	3	.....	.....	8	.....	1	.....	.....	5	1
Do	May	40,000	19	63	18.9	13	.....	9	.....	.....	2	.....	.....	4	.....	.....	.....	.....	9	1
Do	June	40,000	19	64	19.2	7	.....	8	.....	1	3	.....	.....	3	.....	.....	.....	.....	10	3
Selma, Ala	July	7,505	10	16	25.6	4	.....	3	.....	4	9	.....	.....	.....	.....	1	.....	1	.....	.....
Baton Rouge, La	do	7,250	6	12	19.9	.....	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	August	7,250	8	20	33.1	.....	.....	4	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....
Austin, Tex	June	16,000	8	26	19.5	3	1	6	.....	3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Brownsville, Tex	July	6,000	.....	17	34.0	5	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....
Do	August	6,000	4	9	18.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
San Antonio, Tex	do	20,695	18	33	19.1	4	.....	4	.....	2	2	.....	.....	.....	.....	.....	.....	.....	5	.....
Nashville, Tenn	July	43,543	65	126	34.7	13	.....	16	.....	10	1	3	.....	7	.....	.....	.....	16	.....	3
Do	August	43,543	43	98	27.0	9	2	15	.....	7	4	1	.....	5	.....	2	.....	.....	5	1
Mansfield, Ohio	July	10,000	6	16	19.2	2	.....	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Toledo, Ohio	June	50,000	24	60	16.8	8	.....	5	1	.....	.....	.....	.....	7	.....	.....	.....	3	10	4
Do	July	50,000	57	91	23.0	9	1	.....	.....	.....	.....	.....	.....	.....	1	1	.....	3	35	4
Lansing, Mich	do	8,326	8	9	12.7	.....	.....	2	1	.....	.....	.....	.....	1	.....	.....	.....	1	.....	3
Chicago, Ill	do	503,298	900	1,327	31.6	65	11	500	79	11	5	27	.....	45	7	3	3	8	662	31
Do	August	503,298	614	995	23.7	68	23	286	52	21	.....	30	.....	51	6	3	1	7	430	32
Milwaukee, Wis	July	.....	103	265	27.7	14	3	75	7	1	2	3	.....	15	.....	2	.....	.....	.....	9
Watertown, Wis	do	12,000	7	14	14.0	3	.....	2	1	.....	.....	5	.....	.....	.....	1	.....	.....	8	.....
Saint Paul, Minn	do	41,800	73	112	32.1	10	2	46	4	1	.....	.....	.....	1	.....	1	.....	.....	.....	6
Keokuk, Iowa	do	12,125	7	18	17.8	2	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Do	August	12,125	3	11	10.9	2	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Virginia City, Nev	April	10,000	4	16	19.2	2	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	4
Do	May	10,000	3	21	25.2	1	.....	.....	.....	.....	.....	2	.....	5	.....	.....	.....	.....	.....	5
Do	June	10,000	8	22	26.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Do	July	10,000	2	13	15.6	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oakland, Cal	do	35,000	10	24	8.2	.....	.....	4	1	1	1	.....	.....	1	.....	.....	1	2	.....	2
Santa Barbara, Cal	June	3,500	2	6	20.6	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	July	3,500	2	12	41.2	4	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....

NOTES.

PROVIDENCE, R. I.—In addition to the mortality given above, there were, in July, 9 still-births, 4 of American and 5 of foreign parentage. The deaths from diarrhœal diseases were more than for July, 1879, but not so many as in some former years. In 1876, they formed 41 per cent., and in 1880 only 36.4 per cent. of the total mortality. The total death-rate of white and colored differed only by a fraction. The deaths under 5 years were more than 55 per cent. of the whole number. In August, there were 5 still-births, 3 being of American parentage. The deaths from diarrhœal diseases in this month were less than 18 per cent. of the total. The death-rate of the colored population was 33, while that of the white was less than 19 per 1,000 per annum. The deaths under 45 years were less than 45 per cent. of the whole number.

NEW HAVEN, CONN.—Mean temperature for July, 73°.5; mean daily range, 15°.7; rain fell on 14 days; mean humidity, 73.5; prevailing winds, south. For August, mean temperature, 70°.1; mean daily range, 17°.2; rain on 10 days; mean humidity, 76.8; prevailing winds, south.

BURLINGTON, VT.—Marriages in June, 5; births, 32; mean temperature, 68°.1; mean humidity, 62.3; rainfall, 1.33 inches.

SCRANTON, PA.—For July, 8 marriages and 88 births; annual birth-rate, 26.4 per 1,000.

DISTRICT OF COLUMBIA.—The population of the District is now estimated at 180,000; but, in the absence of the official return, the health officer retains the former estimate of 170,000. The death-rate is probably about 30.5, instead of 32.4 as in the table. That of the white population is stated at 23.2; of the colored at 45.5. The mortality under 5 years was 58.8 per cent. of the total. Births in June, 272, giving an annual rate of 19.2 per 1,000; of these, 139 were white and 133 colored, giving an annual rate per 1,000 of 14.6 for the white and 28.5 for the colored population; still-births, 25, of which 11 were white and 14 colored. Marriages *reported*, 72: white, 47; colored, 25. Highest temperature noted, 96°.5; lowest, 49°.5; mean daily range, 19°.9; prevailing winds, west; highest velocity 26 miles, south; rain on 14 days; rainfall, 3.52 inches.

NORFOLK, VA.—Of the 73 deaths in July, 31 were white, giving an annual death-rate of 24.9; among the colored population there were 42 deaths, and the rate was 44.6. Of those under 5 years there were 14 white and 23 colored. Only 1 still-birth is reported.

PETERSBURG, VA.—There were 23 deaths in August among the white and 29 among the colored population, making their respective death-rates 26.4 and 29.0 per 1,000 per annum. Of the deaths under 5 years, 6 were white and 14 colored. Population, 10,000 white, 12,000 colored.

MOBILE, ALA.—The total of deaths during the six months was 326. Of these, 153 were white, rate 10.9; and 173 were colored, rate 28.8 per 1,000 per annum. The still-births were 34; of which 11 were white.

SELMA, ALA.—Of the 16 deaths in July, 9 were white and 7 colored, making the respective death-rates 31.5 for the white and 21.2 for the colored population.

BATON ROUGE, LA.—Of the 20 deaths in July, there were 7 white and 13 colored. Relative populations not given. In August the deaths were 6 white and 6 colored. In each month there was one still-birth, both colored.

AUSTIN, TEX.—Of the 26 deaths in June there were 17 white and 9 colored, the respective death-rates being 17 and 27 per 1,000 per annum. The rate for the year 1879 was 15.5. Rain-fall in 1879 was 18.34 inches; highest temperature 100, lowest 16.

NASHVILLE, TENN.—The deaths for July were 66 white, 60 colored; death-rates 28.4 white, 45.9 colored. Daily mean temperature, 86°.5 highest, 71°.7 lowest; mean for the month 78°.4. Rainfall, 5.69 inches. Prevailing winds northwest. For August the deaths were 52 white and 46 colored; death-rates, 22.4 white, 35.4 colored. Daily mean temperature, highest, 87°.2; lowest, 68°.2; mean for the month, 79°.4. Rainfall, 2.22 inches. Prevailing winds, east.

TOLEDO, Ohio.—In the table the still-births and premature births are deducted from the number of deaths given in the report. In June there were 7 of these, and in July the same number. The death-rates in the table are taken from the report, without correction for still-births.

CHICAGO, ILL.—For July, 80 premature and still-births, which should be deducted to obtain the proper death-rate. Mean temperature 72°.7; highest, 95°; lowest, 57°; prevailing winds, southwest; rain on 15 days; and rainfall 3.5 inches. For August 57 premature and still-births are noted. Mean temperature, 72°.9; highest, 93°; lowest, 53°; prevailing winds, northeast; rain on 15 days; rainfall, 4.47 inches.

MILWAUKEE, WIS.—For July, 11 still-births and 2 premature births are noted; these are not included in the mortality. Highest temperature observed, 94°; lowest, 50°; greatest daily range, 26°; least, 8°; mean daily average, 15°.5; mean for the month, 68°.9; rainfall 3.2 inches; prevailing winds, north; rain fell on 21 days.

SAINT PAUL, MINN.—Mean temperature for the month, 76°.6; highest, 93°; lowest, 52°; prevailing winds, northwest; rain on 16 days; rainfall, 2.75 inches.

KEOKUK, IOWA.—Of the 18 deaths in July, 12 were white, annual rate, 12.9; and 6 colored, annual rate, 75 per 1,000. Mean temperature, 62°.3; highest daily mean, 91°.3; lowest, 44°; rainfall, 2.25 inches. For August the races are not separated in the report. Highest temperature noted, 100°; lowest, 56°; prevailing winds southwest; rain on 9 days; rainfall, 3.81 inches; mean temperature for the month, 78°.5.

OAKLAND, CAL.—In July, 41 marriages and 46 births are recorded. Of 5,410 pupils in public schools, 120 were reported sick during the month. Mean temperature, 59°.5; highest, 76°; lowest, 51°; mean daily range, 12°.3; mean humidity, 86.8.

The secretary of the State board of health remarks that the month of July has been marked by unusual exemption from epidemic diseases in California, and a low death-rate in all the cities. A wet winter is there regarded as the precursor of a healthy summer.

THE RELATION OF CLIMATE AND DISEASE.

Dr. R. A. Cleemann, of Philadelphia, makes the following comments upon the subject of climate in its relation to disease, as treated in the paper of Prof. Cleveland Abbe, published in No. 3, Vol. II, of the BULLETIN:

Professor Abbe in discussing the subjects submitted to him by the National Board of Health is in error, I think, in attributing so much importance to sudden meteorological changes as affecting for ill the death-rate.

Nevertheless, for reasons which will presently appear, I applaud his advice to record the daily maxima and minima of the meteorological observations, instead of merely a daily mean, understanding, of course, that the actual values of the maxima and minima are given—not alone their difference, the range. The expression of these items in curves is the most natural one, and great simplicity is attained in making the record but once daily by means of the apparatus he recommends.

The injunction for dealing with such records, however, namely, that "we must first inquire as to the cause of the disease from the experimental student of physiology, and as to what climatological features are of importance, and then turn to the meteorological records to find them if we can," though admirable from a scientific point of view, is, I fear, of too limited applicability in the present inchoate condition of experimental physiology.

Yet of the principles he lays down to guide us after this method, I give cordial assent to the first, that long-continued extreme hot weather, with light winds and calms (though I look upon the latter as very secondary), produces nervous debility.

But I take issue with our author, as I have hinted above, as to the baneful effects of sudden climatic changes, an idea which crops out all over his paper. On the contrary, I believe that such changes are often beneficial, as when after a prolonged season of high temperature in summer a fall takes place in the thermometer, or when in winter a succession of very cold days is broken by a rise in the mercury. If the position of Professor Abbe were the true one, we would expect to find the death-rate higher in that period of the year when the climate is less equable, and lower in that when the greater changes occur. But the reverse is the case. To speak only in general terms, the mortality in Philadelphia is greatest in the summer when the daily range of the thermometer is least, while in London the largest number of deaths occurs in the winter, the period of the least range of the mercury. These facts seem to show that the better view finds danger to health in the continuance of extremes of heat and cold (and presumably in the same of the other elements of climate). But these extremes are probably relative, having reference to the monthly or daily averages through many years of any particular climate. I believe it can be shown that a degree of temperature will cause the death-rate to rise in London which would be unfelt in Philadelphia; the explanation of which I recognize in the theory of acclimation.

Holding such views I approve the record of both minima and maxima observations, because it aids in the detection of breaks in the continuity of heat or cold which will prove favorable, not disastrous, and I insist upon taking the actual values of the maxima and minima, since it is important to know how these compare with their usual values at the same season of the year.

It seems to me that Professor Abbe is hardly just to the plans of dealing with statistics adopted by Mr. Buchan and Dr. Mitchell in their elaborate paper, which he quotes. After showing, as these gentlemen have done, the coincidence year after year of certain meteorological conditions with certain events, they make a legitimate induction when they say these stand in the relation of cause and effect, which can only be swept away by another farther reaching induction. But has this been elicited as yet? And the syllogism is very rigid which he has designed to disprove the effect of heat in causing diarrhœa as advanced by Messrs. Buchan and Mitchell. He suggests as a necessary minor premise, "every other conceivable cause has been examined and proven to be harmless," and declares that "certainly no one will be found to assert the truth of this premise." No one will be found, perhaps, to assert that every other conceivable cause is harmless, but many, I believe, will stand by the statement that every other probable cause, as far as examined, has been found insufficient to explain the extensive prevalence of diarrhœa in hot weather. Hence the conclusion that heat is a very prominent factor in the causation of diarrhœa may be looked upon as at least provisionally true.

In my opinion, "acid fruit, unripe fruit, soured milk, tainted milk and food" are all too partial causes, while "spore dust in the atmosphere," though very attractive in speculation, is yet too visionary a thing to be brought forward seriously. Further investigations may show that the latter is a real disturbing entity, invading air, or food, or drink, as the poison of typhoid fever is supposed to do—a disease which has been shown to bear, like cholera infantum, though in a less defined degree, a relation to the amount of caloric in the atmosphere; but, till these are more numerous and confirmatory, is it not wiser to be chary in putting too much weight upon it?

Professor Abbe, in opposition to the agency of heat in determining cholera infantum, and, indeed, to show that the disease may result from the opposite condition of cold, offers a diagram in which he has placed the mortality from cholera infantum in Philadelphia, as deduced from weekly statements, in relation with the curves of the daily maxima and minima of temperature at Washington. A chart thus constructed is somewhat inaccurate, so that I have substituted one in which are represented the daily record of the deaths from cholera infantum and the curves of the daily maxima and minima of temperature at Philadelphia, the meteorological data for which were kindly furnished me by Prof. J. A. Kirkpatrick, of this city.

From the corrected chart it appears that the mortality from cholera infantum culminated about July 1–9, while the period June 28, July 5, was distinguished by the highest temperature of the year as well as by continuity of heat as represented by a mutual approach of the maximum and minimum curves of temperature. Depressions of temperature had preceded the great rise, in June 15–18, and on June 24–26, though on neither of these occasions was the maximum below 75° F., while only on the 17th did the minimum fall as low as 63° F., the minimum on June 27 being as high as 67° F.

Professor Abbe would refer the increased mortality of July 1–9 to the "remarkable sudden fall of temperature" on June 15–18, on the ground that "the actual mortality occurs always some time after the disease has taken hold upon the child." If he were correct the average duration of *fatal* cases of cholera infantum at this season of the year—including entero-colitis and what is known as true cholera infantum, for the latter term in the register embraces both of these—would be from two to three weeks. But this certainly is not my experience, nor can I find any authorities giving so long a period. Some cases reach their end in death in one, two, and three days, especially such as occur in the hottest weather, and though the majority do continue longer, yet, I repeat, if they are to terminate fatally, my experience is against so long a course for the average as two to three weeks.

Our author's description of the sequence of events in the chain of

causation appears to me, and I presume will to most other physicians, rather fanciful and far-fetched: "The sudden change from hot to cold on this date [June 22–24 on his diagram, the maximum mortality being represented there as on July 6–14] was the cause of many infants or their mothers taking cold which settled in the bowels, and that the disease ran along with no more than the ordinary mortality, until the sudden increase of heat on July 6 caused the mothers to yield to the temptation of a change of diet from one of animal food and ripe vegetables to one of fresh vegetables and fruit, a change which assuredly affects the babe far more than the direct influence of temperature." Here are four distinct propositions: First, that in such a fall of temperature as indicated many infants "took cold"; second, that the cold "settled in the bowels" (why should it attack this part, especially at this season of the year?); third, that a sufficient number of mothers changed their diet to influence to this degree the mortality from cholera infantum; and fourth, that such a change "affected the babe far more than the direct influence of the temperature." It would take me too far to discuss specifically all these propositions, none of which would be generally accepted, and in support of which no other proof is offered than that furnished by the relations in the diagram above pointed out, though Professor Abbe asks that some one should attempt the discovery of some testimony for the third proposition by "comparing the statistics of cholera infantum with the daily sale of cherries, cucumbers, green apples, &c."

Professor Abbe also objects to the heat-causation theory of cholera infantum, that "the equally hot or hotter periods in May 6–12, June 6–14, August 7–15 and 17–27, and September 6–10 were not attended by any special increase, but rather by a very decided decrease or absence of cholera infantum." My chart shows that there were no periods as hot as that from June 28 to July 5, closely followed on July 1–9, by the maximum mortality from cholera infantum. Yet there were seasons in May, August, and September when the thermometer ranged very high, and there was no excessive mortality from cholera infantum. But this is not an unanswerable argument against the causative agency of excessive heat, for the reply may be made that the hot term in May found the infantile nervous system equal to resist the heat, toned up as it was by the low temperature of the previous winter, an effect of cold well recognized by the physiologist; on the other hand the hot periods in August and September came at a time when the more feeble children had already succumbed, and the stronger had become in a measure acclimated to a high temperature.

It seems to me that Professor Abbe has not refuted the proposition that heat is the chief cause of cholera infantum, the belief which finds the most acceptance among etiologists, and one which may be brought in accord with a principle enunciated by Professor Abbe himself, and commended above, namely, thatlong -continued extreme hot weather produces nervous debility. Whether such an effect comes about through altered blood or by a direct action upon the nervous system, it is well known that in infants a weakened sympathetic is the result, which leads to imperfect or depraved secretions in the alimentary canal; and in proportion to the change in the secretions and the inappropriateness of the food ingested are developed the various degrees of the disease known in America under the generic title cholera infantum, and in Europe under those of summer diarrhœa, sporadic cholera, &c. However, that the food is but a secondary cause is proven by the fact that articles of diet, such as farinaceous substances which may be kept sweet, are eaten by infants with impunity for a long time in the cold season, but are at once followed by diarrhœa in summer.

ABSTRACTS FROM CONSULAR REPORTS.

ALEXANDRIA, EGYPT, *August* 5.—A report is forwarded from Nerroutsos Bey, M. D., president of the Egyptian general board of health, giving the detailed quarantine regulations for vessels carrying pilgrims to and from Arabian ports on the Red Sea. The principal station is at Tor, and a quarantine of from 10 to 15 days is ordered for all vessels infected with cholera or plague.

CONSTANTINOPLE.—United States Consul G. H. Heap, under date of August 20, forwards reports of the sanitary board, and also bulletins of epizoötic diseases. From these it appears that the famine in the provinces is at an end, and the attendant diseases are disappearing. No epidemic disease prevails among cattle.

LIBERIA, AFRICA.—The United States vice consul-general informs the State Department that it is not possible to obtain at Monrovia the data for reports to the National Board of Health. No records of diseases or deaths are kept by the authorities, and at least half of those who die have no medical attendance. More than three-fourths of the towns and settlements in Liberia have no regular physicians, and the so-called "country doctors," using roots and herbs, are credited with nearly as many deaths as are caused by disease. Efforts will be made by the consul to obtain information.

SANTA CRUZ, PALMA, CANARIES.—United States Consul F. W. Lavers reports, for the month of July, 11 deaths in a population of 6,070, giving an annual rate of 21.7 per thousand. The causes of death are not given, but no contagious disease is reported.

SINGAPORE.—United States Consul A. G. Studer forwards a report for the month of June, giving a total of 296 deaths, of which only 5 were among Europeans. Among the causes of death were, fever 82, diarrhœa and dysentery 40, consumption 28, and rheumatism 14. No epidemic disease in the district.

TALCAHUANO, CHILI.—The United States consul reports that this is usually one of the healthiest towns on the coast, but in April last small-pox was brought there by a vessel from the north, and until recently the disease has raged to an alarming extent. In May there were 136 deaths from this cause, mostly children. The consul had under his own care 25 cases of seamen and deserters from vessels; of these, but few died.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

CHARLESTON, S. C., September 10.—Dr. F. Irwin reports an epidemic of *dengue* fever, there being about 2,000 cases in the city.

FAIRFAX COURT-HOUSE, VA.—Under date of September 2, Dr. R. W. Dorsey states that from early in May to the middle of July cholera infantum was very fatal in that place. One case of typho-malarial fever is reported at Vienna, a place 5 miles north of Fairfax Court-House, where a number of cases occurred last year. The village is badly located, on swampy land, and but little attention is given to sanitary conditions.

HAVANA, CUBA.—During the week ending September 3, 25 deaths from yellow fever were reported, and for the month of August there were 158 deaths from that disease. Most of the vessels discharging at the wharves at this season become infected, but on removing to the open bay, and using fumigation and other means of disinfection, they may be freed from the poison.

HOLLY SPRINGS, MISS.—Dr. F. W. Dancy, under date of September 9, reports only five deaths for the three summer months, one from consumption, one from diabetes, one from dysentery, one from paralysis, and one from accident. The population is stated at 2,360.

KANSAS CITY, MO.—Dr. J. H. Van Eman, under date of September 10, states that there has been less sickness among children than usual during July and August. At present a form of fever is prevalent which is of a malarial and typhoid type, frequently fatal, and not controlled by quinine.

NAVASOTA, TEX.—Under date of September 2, Dr. A. R. Kilpatrick reports an unusual mortality for the months of July and August, chiefly due to malarial diseases. Four deaths were of white persons, 2 being adults. Five colored persons died, 3 of whom were adults. Of the 9 deaths in July 2 were from consumption, both colored; of the 3 deaths among colored children, 2 were from marasmus and 1 from accident. In August there were 10 deaths, 8 white and 2 colored. Malarial fever caused 6 of the deaths among the whites. In July rain fell on 10 days; the temperature ranged from 66° to 94°. In August rain fell 8 days, mostly moderate showers; the thermometer ranged from 66° to 100°. Ophthalmia has been prevalent all the summer.

NEW LONDON, CONN., September 10.—Dr. J. G. Stanton reports the prevalence of diphtheria of a very fatal type.

NEW ORLEANS, LA.—Dr. S. H. Collins writes, under date of September 3, that the change to cooler weather has greatly lessened the number of cases of *dengue* fever. Dr. Bemiss reports that many cases occurred at Biloxi and vicinity. The fever this year is marked by pains, lasting from 15 to 30 hours, being shorter than usual, and the absence of eruption. Congestion of the kidneys has been noted, but no albumen in the urine. The disease is rarely fatal. In New Orleans the fever has been chiefly confined to one district. Malarial fevers are prevalent throughout the country, but readily yield to quinine.

SALEM, FAUQUIER COUNTY, VA, September 4.—Dr. F. Horner, jr., writes that a fatal form of diphtheria prevails in that place, among white and colored children occupying certain tenement houses having floors near the ground. The water used by the inmates of these houses is from wells which contain much filth, and are never cleaned out.

INSPECTORS' REPORTS.

BAY SAINT LOUIS, MO.—Dr. E. Latham, sanitary inspector, reports, under date of September 2, that *dengue* fever is epidemic at that place. It has been already noted as prevailing in New Orleans.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 4, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrheal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	34,600	8	13	19.4	3	1	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H .... Concord	14,000	1	5	18.5	2	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	3	5	15.8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....
Mass .... Boston	375,000	108	207	28.8	26	.....	69	4	5	.....	.....	.....	5	.....	3	.....	3	83	8
Cambridge	52,800	7	17	15.4	3	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....
Edgartown	1,294	.....	1	4.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,000	4	15	29.1	3	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	5	1
Newburyport	13,800	5	7	26.0	.....	.....	1	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	1
Marblehead	7,285	2	5	34.9	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	1	2	27.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	2	8	58.8	3	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	.....	41	43.6	5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lawrence	39,000	10	14	18.7	.....	.....	6	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Lowell	59,340	23	36	31.5	5	.....	10	1	.....	.....	.....	.....	2	.....	.....	.....	.....	11	.....
Pittsfield	12,300	.....	9	37.4	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....
Worcester	58,000	11	21	18.8	2	.....	7	.....	2	1	.....	.....	1	.....	.....	.....	1	.....	2
Lynn	38,400	5	19	25.9	1	.....	2	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,608	4	4	14.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	6	8	19.0	1	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Bridgewater	3,825	1	2	27.2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,000	1	4	23.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,600	4	6	24.2	1	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	2	8	16.7	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Springfield	33,000	.....	4	6.3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
R. I. ..... Providence	104,862	14	36	17.9	14	1	6	1	.....	.....	.....	.....	2	.....	.....	.....	.....	8	.....
Conn ... New Haven	63,000	4	30	24.5	4	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....
New Britain	14,000	2	4	14.8	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,200	4	7	18.2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
N. Y ..... New York	1,209,601	279	529	22.8	71	8	110	24	3	14	7	.....	54	1	3	.....	1	189	27
Brooklyn	564,448	155	256	23.7	27	7	49	23	5	5	4	.....	19	.....	1	.....	3	97	11
Yonkers	19,000	5	9	24.7	2	.....	1	.....	.....	2	.....	.....	1	.....	.....	.....	.....	3	.....
Poughkeepsie	20,200	2	6	15.6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Newburg	18,043	.....	5	14.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utica	34,000	9	21	32.2	1	.....	4	.....	1	.....	1	.....	2	.....	.....	.....	.....	.....	1
Buffalo	155,159	25	45	15.1	6	.....	9	3	2	1	2	.....	.....	1	.....	.....	2	19	1
Watertown	10,666	.....	1	4.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Binghamton	17,236	1	2	6.0	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	1	5	43.5	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Jervis	10,000	.....	2	10.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
N. J ..... Hudson County	209,000	26	59	14.7	8	1	10	1	1	2	3	2	3	.....	2	.....	.....	18	4
Camden	41,704	8	14	17.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	2	4	1
Orange	13,213	4	7	28.1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plainfield	8,000	2	4	26.1	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	850,000	.....	297	18.2	40	2	28	3	15	.....	7	.....	6	.....	3	8	1	.....	.....
Pittsburgh	156,634	33	60	19.7	5	.....	13	8	3	.....	1	.....	2	1	1	.....	1	13	4
Erie	28,568	4	6	11.1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....
Del ..... Wilmington	44,000	4	8	9.4	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	393,796	66	160	21.2	26	1	19	5	11	2	7	.....	5	.....	.....	.....	5	47	11
District of Columbia	180,000	30	72	20.8	13	.....	13	2	2	4	.....	.....	1	.....	.....	.....	.....	26	2
Va ..... Norfolk	27,200	10	12	23.2	2	.....	2	.....	1	2	.....	.....	.....	.....	.....	.....	.....	7	.....
Richmond	64,670	18	32	26.0	7	.....	8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	8	1
Lynchburg	16,400	3	4	12.5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	4	7	20.8	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	3	34	31.0	5	.....	1	.....	.....	2	.....	.....	3	.....	.....	.....	.....	.....	2
Ga ..... Augusta	27,012	6	14	27.1	2	.....	4	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Atlanta	38,000	4	12	16.2	1	.....	3	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1	1
Savannah	33,248	16	31	48.9	2	.....	5	1	2	2	.....	.....	1	.....	1	.....	.....	.....	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	2	3	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	.....	3	13.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	8	17	22.1	1	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	1	6	.....
Selma	7,505	4	6	41.7	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Miss .... Columbus	4,747	.....	3	32.9	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Natchez	7,000	2	5	36.8	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	.....	.....	24.6	15	.....	5	1	.....	17	.....	.....	.....	5	4	.....	1	.....	.....
Shreveport	8,033	2	5	32.6	.....	.....	1	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morgan City	2,018	.....	1	25.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Baton Rouge	7,250	3	3	21.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Tex ..... San Antonio	20,597	3	7	17.7	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	1	2	.....
Ark ..... Little Rock	22,000	4	7	16.6	1	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	8	23	27.1	3	.....	4	.....	2	1	.....	.....	.....	.....	.....	.....	1	9	1
Clarksville	7,250	1	1	7.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Memphis	34,000	5	26	39.9	4	.....	4	.....	.....	6	.....	.....	2	.....	1	.....	.....	.....	1
Murfreesboro'	3,800	2	3	41.4	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Ky ..... Louisville	155,000	22	56	18.8	8	2	3	1	1	3	1	.....	1	.....	.....	.....	.....	12	1
Ohio .... Cincinnati	280,000	45	96	17.9	10	1	12	1	.....	.....	2	.....	4	2	1	.....	.....	28	5
Cleveland	175,000	.....	81	24.1	4	1	17	1	2	.....	5	.....	1	.....	.....	.....	.....	.....	4
Gallipolis	4,500	.....	1	11.6	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	2	8	10.7	1	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	3	1
Portsmouth	11,320	3	5	23.0	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	16	30	20.5	4	.....	5	1	1	2	.....	.....	2	.....	.....	.....	.....	9	1
Richmond	13,000	1	4	16.5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Evansville	30,000	8	20	34.8	3	1	2	1	1	10	.....	.....	.....	.....	1	.....	.....	.....	.....
Ill ..... Moline	7,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Peoria	34,850	2	5	7.3	1	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....
Aurora	12,059	1	5	21.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	.....	4	14.0	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Elgin	8,770	.....	3	17.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	116,000	39	56	25.1	4	.....	13	3	.....	.....	2	.....	4	.....	2	.....	.....	21	1
Minn .... Saint Paul	41,800	7	16	20.0	1	.....	3	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Mich ... East Saginaw	19,000	2	6	16.5	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Iowa .... Keokuk	12,125	.....	2	8.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 4, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Mo ..... Saint Louis	331,392	48	123	19.4	9	.....	17	.....	2	8	8	.....	2	.....	1	.....	1	48	6
Kans .... Lawrence	8,500	1	5	30.1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	30,652	2	6	10.4	.....	.....	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	2	6	12.5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Cal ..... San Francisco	233,700	26	83	18.5	18	1	7	.....	1	1	.....	.....	6	.....	.....	.....	.....	12	1
Sacramento	21,500	.....	2	4.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	2	4	19.2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,573,048	1,219	2,984	20.9	409	30	524	91	77	107	56	.....	137	11	26	10	32	710	111

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING SEPTEMBER 4, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass .... Boston	370,000	5,000	203	4	28.6	41.7
R. I ..... Providence	100,862	4,000	33	3	17.0	39.1
Del ..... Wilmington	38,000	6,000	8	.....	8.8	....
Md ..... Baltimore	338,334	55,412	119	41	17.4	38.7
District of Columbia	120,000	60,000	40	32	17.3	27.8
Va ..... Norfolk	15,900	11,300	4	8	13.1	36.8
Richmond	37,970	26,700	12	20	13.3	39.3
S. C ..... Charleston	25,000	32,000	10	24	20.8	39.0
Ga ..... Savannah	18,229	15,019	13	18	37.1	62.3
Augusta	16,182	10,830	2	12	6.5	56.2
Atlanta	22,000	16,000	7	5	16.6	16.4
Brunswick	1,500	1,400	...	...	.....	.....
Ala ..... Mobile	28,000	12,000	11	6	20.5	26.1
Selma	3,425	4,080	2	4	26.6	51.2
Fla ..... Jacksonville	6,000	4,000	1	2	8.7	26.1
Miss ..... Columbus	2,500	2,247	3	.....	62.6	.....
Natchez	3,500	3,500	3	2	44.7	29.8
La ..... New Orleans	159,128	57,231	62	40	20.3	63.8
Shreveport	3,916	4,117	1	4	13.3	51.0
Tenn .... Nashville	27,874	15,669	14	9	25.6	29.7
Clarksville	4,000	3,250	1	1	13.0	16.1
Memphis	16,707	17,293	15	11	47.2	33.2
Ky ..... Louisville	153,125	21,875	42	14	14.3	34.4
Ohio .... Portsmouth	10,320	1,000	5	.....	25.3	.....
Iowa .... Keokuk	11,165	960	2	.....	9.3	.....
Kans .... Lawrence	6,800	1,700	4	1	30.7	30.7
Totals	1,540,437	392,583	617	261	20.9	34.7

The following reports for the week ending September 4 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 7; under 5 years, 2; consumption 1, croup 1. Allegheny, Pa., 78,000; deaths, 26; under 5 years, 11; consumption 4, diarrhœa 6, diphtheria 2, enteric fever 1, scarlet fever 1, lung disease 1, puerperal 2, accident 1. Bath, Me., 8,000; deaths, 4; consumption 1, diarrhœa 1. Battle Creek, Mich., 7,500; deaths, 1; under 5 years, 1; diarrhœa 1. Belfast, Me., 5,308; deaths, 2. Boulder, Colo., 3,030; no deaths. Brattleborough, Vt., 6,000; deaths, 1; consumption 1. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years, 1; croup 1. Calais, Me., 6,162; deaths 1; consumption 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 6; under 5 years, 2; consumption 1, diarrhœa 2, enteric fever 2. Circleville, Ohio, 6,400; deaths, 1; under 5 years, 1. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; deaths, 1; under 5 years, 1; diarrhœa 1. Dallas, Tex., 10,300; deaths, 4; consumption 1, enteric fever 2, accident 1. Davenport, Iowa, 23,000; deaths, 9; under 5 years, 6; diphtheria 3, scarlet fever 3. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 360; no deaths. Fernandina, Fla., 3,000; no deaths. Franklin, Ind., 2,700; deaths, 2. Gunn City, Mo., 125; one death, enteric fever 1. Helena, Mont., 3,630; deaths, 1; under 5 years, 1. Hernando, Miss., 1,000; no deaths. Huntingdon, Pa., 4,500; deaths, 2; under 5 years, 1; consumption 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 1; under 5 years, 1; accident 1. Kenosha, Wis., 5,500; deaths, 4; under 5 years, 2; consumption 1, croup 1, diarrhœa 1. La Salle, Ill., 10,000; deaths, 2; consumption 1. Lebanon, Pa., 9,000; deaths, 3; under 5 years, 1; consumption 1, enteric fever 1. Madison, Wis., 9,009; deaths, 6; under 5 years, 4; enteric fever 1, scarlet fever 3. Manitowoc, Wis., 6,510; deaths, 2; under 5 years, 1; diarrhœa 1. Martinsburg, W. Va., 6,534; deaths, 2; diarrhœa 1. Milan, Tenn., 1,800; deaths, 2; under 5 years, 2; diarrhœa 1, enteric fever 1. Milledgeville, Ga., 3,000; no deaths. Monmouth, Ill., 6,000; deaths, 4; under 5 years, 2; consumption 1, lung disease 1. Montgomery, Ala., 17,000; deaths, 5; under 5 years, 2; consumption 2, enteric fever 1, whooping-cough 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 3; consumption 1, malarial fever 1. Muscatine, Iowa, 8,412; deaths, 4; diarrhœa 1, malarial fever 1. Niles, Mich., 4,200; no deaths. Oshkosh, Wis., 17,030; deaths, 8; under 5 years, 2; consumption 3, croup 2, diphtheria 2, accident 1. Painesville, Ohio, 5,500; no deaths. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; no deaths. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; no deaths. Port Royal, S. C., 750; deaths, 3; malarial fever 1, accidents 2. Rensselaer, Ind., 901; no deaths. Rock Island, Ill., 12,000; deaths, 4; under 5 years, 3; consumption 1, diarrhœa 1, scarlet fever 1. Santa Cruz, Cal., 5,000; deaths, 1. Springfield, Ohio, 21,000; deaths, 10; under 5 years, 3; diarrhœa 3, enteric fever 2. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 2. Summit, Miss., 1,808; deaths, 1; malarial fever 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; no deaths. Tuscaloosa, Ala., 2,000; deaths, 1; under 5 years, 1. Waxahatchie, Tex., 2,000; no deaths. Wesson, Miss., 2,000; deaths, 1. Winchester, Va., 5,000; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Youngstown, Ohio, 15,089; deaths, 8; under 5 years, 5; diarrhœa 7. Total population, 428,662; deaths under 5 years, 57; total number of deaths, 149; annual rate per 1,000, 18.1.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Aug. 28	2	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Pr. Edward Island	Charlottetown	12,000	Aug. 21	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.3
Do	do	12,000	Aug. 28	2	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64.7
Bermuda	Hamilton	14,867	Aug. 24	1	3.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	do	14,867	Aug. 31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
Cuba	Havana	195,437	Aug. 28	176	47.0	.....	.....	.....	26	.....	1	.....	5	.....	.....	.....	.....	84
Hayti	Port au Prince	30,000	Aug. 18	16	27.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
Do	do	30,000	Aug. 25	21	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
Do	Aux Cayes	9,000	Aug. 14	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Mexico	Acapulco	3,500	Aug. 7	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	do	3,500	Aug. 14	6	89.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	Matamoros	16,000	Aug. 28	9	29.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brazil	Rio Janeiro	330,000	Aug. 7	174	27.5	.....	.....	.....	5	.....	.....	.....	2	.....	.....	.....	3	.....
Azores	Fayal	7,630	July 24	8	54.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
Do	do	7,630	July 31	8	54.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Do	do	7,630	Aug. 7	4	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
Teneriffe	Santa Cruz	16,610	Aug. 7	9	28.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Ireland	Queenstown	10,000	Aug. 28	5	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Dublin	314,666	Aug. 21	228	37.7	.....	.....	.....	.....	.....	5	.....	2	.....	3	.....	25	58.3
Do	do	314,666	Aug. 28	228	37.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	25	59.1
Do	Belfast	230,000	Aug. 21	94	26.8	.....	.....	.....	.....	5	.....	15	4	.....	.....	5	1	58.9
Do	do	230,000	Aug. 28	102	29.1	.....	.....	.....	.....	4	.....	13	2	.....	.....	1	1	60
Scotland	Dundee	155,100	Aug. 21	55	18.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	59.2
Do	Glasgow	589,598	Aug. 21	221	19.5	.....	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	15	59.6
Do	Leith	58,479	Aug. 28	32	28.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	58.3
England	Liverpool	544,056	Aug. 28	365	35.0	.....	.....	.....	.....	.....	.....	6	7	11	3	22	31	62.5
Do	London	3,254,260	Aug. 21	1,492	21.3	.....	.....	.....	.....	.....	4	.....	16	.....	.....	.....	103	63.8
Do	Newcastle	148,000	Aug. 21	70	24.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	59
Do	Bradford	197,196	Aug. 21	89	23.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
Do	Leeds	318,929	Aug. 7	143	23.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Do	do	318,929	Aug. 14	157	25.7	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	3	63.8
Do	Tunstall	156,282	Aug. 21	91	30.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Do	Bristol and Clifton	213,500	Aug. 21	84	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Wales	Cardiff	82,364	Aug. 28	46	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.5
France	Paris	1,988,806	Aug. 19	1,006	26.3	.....	.....	.....	.....	.....	41	.....	36	.....	.....	.....	86	.....
Do	do	1,988,806	Aug. 26	1,048	27.4	.....	.....	.....	.....	.....	35	.....	42	.....	.....	.....	88	.....
Do	Rouen	104,902	Aug. 21	55	27.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Havre	92,068	Aug. 21	78	44.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64
Do	Lyons	342,815	Aug. 14	191	28.0	.....	.....	.....	.....	.....	10	.....	2	.....	.....	.....	15	.....
Do	do	342,815	Aug. 21	206	31.4	.....	.....	.....	.....	.....	6	.....	16	.....	.....	.....	8	.....
Switzerland	Geneva	52,077	Aug. 21	22	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Do	Zurich	22,103	Aug. 21	4	9.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Amsterdam	316,952	Aug. 21	181	29.8	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	5	70
Germany	Mannheim	50,500	Aug. 28	20	20.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Do	Berlin	1,096,644	Aug. 14	596	28.3	.....	.....	.....	.....	.....	.....	39	12	.....	.....	142	55	64
Do	Frankfort	129,000	Aug. 7	52	21.0	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	67
Do	do	129,000	Aug. 14	48	19.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	4	67
Do	Brunswick	74,000	Aug. 21	52	36.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Do	Hamburg	400,000	Aug. 7	231	30.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....
Do	Breslau	276,000	Aug. 14	193	36.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	35	.....
Do	Barmen	95,000	Aug. 21	41	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	4	61
Do	Bremen	109,000	Aug. 14	46	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Cologne	141,639	Aug. 21	95	34.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....
Saxony	Chemnitz	92,137	Aug. 14	54	30.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	67
Do	Dresden	220,500	Aug. 14	109	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	10	62
Do	do	220,500	Aug. 21	111	26.2	.....	.....	.....	.....	.....	.....	2	2	.....	.....	7	7	64
Do	Leipsic	150,836	Aug. 21	70	24.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Belgium	Brussels	406,638	Aug. 14	194	31.8	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	2	.....
Do	do	406,638	Aug. 21	192	32.1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	8	.....
Denmark	Copenhagen	235,254	Aug. 17	132	29.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Austria	Vienna	746,243	Aug. 14	326	22.8	.....	.....	.....	.....	.....	7	.....	3	.....	.....	.....	.....	63
Do	Trieste	128,233	Aug. 7	85	34.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hungary	Buda-Pesth	344,604	Aug. 14	261	39.5	.....	.....	.....	.....	.....	6	.....	3	.....	.....	.....	.....	.....
Russia	Warsaw	357,169	Aug. 14	259	37.8	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	74
Norway	Christiania	118,601	Aug. 14	60	26.7	.....	.....	.....	.....	1	1	.....	.....	.....	.....	3	3	68
Spain	Carthagena	76,000	Aug. 22	41	27.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	Cadiz	65,028	Aug. 21	45	36.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
Do	Seville	138,000	Aug. 8	130	49.1	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	43	84
Do	do	138,000	Aug. 15	128	48.4	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	27	88
Do	do	138,000	Aug. 22	102	38.6	.....	.....	.....	.....	.....	.....	.....	4	.....	1	.....	17	82
Portugal	Lisbon	225,182	June 12	110	25.4	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	63
Do	do	225,182	June 19	119	27.5	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	62
Do	do	225,182	June 26	129	29.8	.....	.....	.....	.....	.....	2	.....	5	.....	.....	.....	.....	64
Do	do	225,182	July 3	109	25.2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	67
Do	do	225,182	July 10	124	28.7	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	66
Do	Oporto	108,346	July 31	70	33.7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	68
Egypt	Alexandria	220,000	Aug. 21	188	44.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Colony	Cape Town	35,000	Aug. 9	9	13.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63

National Board of Health

BULLETIN.

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MONTHLY REVIEW OF MORTALITY FOR AUGUST, 1880.

The mean population represented in the reports for August was 92,600 more than that for the preceding month, the increase being partly due to the placing of several towns in the table which were formerly excluded, but now require burial permits. The general mortality of the country has been reduced since last month from 26.66 to 21.56, the decrease being chiefly in diarrhœal and other heat diseases. These have been noted as beginning to decline since July 3, when the deaths from such diseases reached their maximum rate of 12.6 per 1,000 per annum. The rate of infant mortality has fallen from 14.46 to 10.24, or nearly 30 per cent., while the general rate has not been reduced quite 20 per cent. The following table shows the rates of mortality from the diseases noted.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
August 7 ..	7,864,991	3,428	22.73	1,722	10.95	50.22	568	3.77	16.57	403	2.67	11.75	165	1.10	4.81	118	0.78	3.44	81	0.54	2.36
August 14 ..	8,298,453	3,546	22.28	1,660	10.43	46.81	586	3.68	15.68	440	2.76	12.41	146	0.92	4.12	109	0.68	3.07	80	0.53	2.25
August 21 ..	8,188,414	3,263	20.78	1,469	9.35	45.02	575	3.66	17.62	403	2.57	12.35	172	1.09	5.27	148	1.23	4.53	102	0.94	3.13
August 28 ..	8,664,360	3,490	21.00	1,631	9.81	46.73	599	3.60	17.17	423	2.55	12.12	176	1.06	5.05	137	0.82	3.92	104	0.62	2.98
Totals	33,016,218	13,727	.....	6,482	.....	.....	2,328	.....	.....	1,669	.....	.....	659	.....	.....	512	.....	.....	367	.....	.....
Means	8,254,054	3,431¾	21.56	1,620½	10.24	47.22	582	3.68	16.96	417½	2.64	12.15	164¾	1.04	4.80	128	0.81	3.73	91¾	0.58	2.67

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
August 7 ..	37	0.24	1.08	47	0.31	1.37	847	5.62	24.71	71	0.47	2.07	19	0.13	0.55	36	0.24	1.05	53	0.35	1.54	10
August 14 ..	29	0.15	0.82	55	0.34	1.55	801	5.04	22.59	87	0.54	2.45	14	0.09	0.40	42	0.26	1.18	56	0.35	1.58	7
August 21 ..	46	0.29	1.41	66	0.42	2.02	768	4.89	23.23	66	0.42	2.02	16	0.10	0.49	43	0.27	1.32	73	0.46	2.24	12
August 28 ..	33	0.20	0.95	48	0.29	1.37	681	4.10	19.51	84	0.50	2.41	11	0.06	0.32	33	0.20	0.95	79	0.47	2.27	10
Totals	145	.....	.....	216	.....	.....	3,097	.....	.....	308	.....	.....	60	.....	.....	154	.....	.....	261	.....	.....	39
Means	36¼	0.23	1.06	54	0.34	1.57	774¼	4.89	22.56	77	0.49	2.24	15	0.09	0.44	38½	0.24	1.12	65¼	0.42	1.90	9¾

Causes of death.—The class of diarrhœal diseases still shows the highest death-rate, but it is steadily declining, and the mean rate is little more than half of that for July. Consumption and lung diseases have declined in nearly the same proportion, the rate of mortality from both being 11 per 1,000 less than it was in July. The zymotic diseases show greater changes; enteric fever continues to increase, having advanced from 0.39 to 0.49, or nearly 33 per cent. This increased rate is more than balanced by the fall of measles from a rate of 0.20 to 0.09 per 1,000; whooping-cough has declined from 0.27 to 0.24, while diphtheria and scarlet fever show no change since last month. Croup is rather more prevalent than in July, the rate having advanced from 0.20 to 0.23.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,638,588	8,357	23.50	1,469	4.13	17.58	1,040	2.92	12.44	429	1.21	5.13	343	0.96	4.14	245	0.69	2.93
Southeast	1,433,260	2,336	21.26	412	3.75	17.64	326	2.97	13.96	86	0.78	3.68	64	0.58	2.74	47	0.43	2.01
Northwest	1,657,169	2,802	22.06	369	2.90	13.18	240	2.37	8.57	129	1.01	4.61	93	0.73	3.32	65	0.51	2.32

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	98	0.27	1.17	95	0.27	1.14	2,060	5.80	24.65	162	0.45	1.94	37	0.10	0.44	68	0.19	0.81	98	0.27	1.05	37
Southeast	17	0.15	0.73	52	0.47	0.22	342	3.10	14.64	64	0.58	2.74	5	0.05	0.21	44	0.40	1.88	97	0.88	4.15	.....
Northwest	28	0.22	1.00	67	0.53	0.24	664	5.23	23.71	72	0.55	2.57	13	0.10	0.60	37	0.29	1.32	61	0.48	2.18	2

Distribution of diseases.—During the summer months there has been a general decline in the death-rate of all pulmonary diseases, that of acute lung diseases having shown the greater reduction. Both classes continue to fall in the Northeast and Southeast sections; but both show an increased rate in the Northwest, which probably results from the earlier change of season in the more elevated portions of that inland section. Croup has increased in all sections, but diphtheria shows a marked decline in the Northwest, with a small increase of mortality in the other sections. The rate of deaths from measles continues to fall in all parts of the country, and scarlet fever has advanced only in the Northwest. Whooping-cough has begun to fall in its rate of mortality for all sections, the most marked decline being in the Southeast, where the disease had spread extensively, and in July reached a death-rate of 0.50; it falls to 0.40 this month. The increase of enteric fever, noted last month, still continues in all sections of the country, the advance being most marked in the Northwest; this may be ascribed to the earlier change of season in that section, as referred to in connection with the increase of mortality from acute lung diseases, enteric fever being notably an autumnal disease in this country. Malarial fevers being in the same class, as to season, a general increase is noted in all sections, being most marked in the Northeast and Northwest, where the temperature required to develop the cause appeared latest. The change of death-rate from diarrhœal and other summer diseases does not necessarily follow the temperature in their decline so closely as in their inception, many deaths occurring from a sudden fall of temperature acting upon subjects previously prepared by the exhausting effects of the heat. The reduction of death-rate from diarrhœal diseases has been greatest in the Northeast, where it had been highest. Since July the rate has fallen 40 per cent. in that section, 30 per cent. in the Southeast, and 20 per cent. in the Northwest. It has been noted that other influences than temperature control the movement of this class of diseases. The epidemic of small-pox at Camden, N. J., has furnished 24 out of the 39 deaths reported; Philadelphia reports 13, and Chicago and San Francisco report 1 each. A report of Asiatic cholera in Erie, Pa., caused some alarm, but no case of that disease has been proved to exist in the country this season. Indiana, Tennessee, and adjoining States have reported extensive prevalence of typho-malarial fevers, but usually not of very fatal type. No yellow fever has appeared at any of the exposed points of the coast, the few deaths reported during the month having occurred on infected vessels or in quarantine hospitals. The fever known as *dengue* has prevailed along the Lower Mississippi and the Gulf coast and in Charleston, S. C., but the mortality was generally small.

ORIGIN AND GROWTH OF THE QUARANTINES OF THE SEA-BOARD STATES OF THE UNITED STATES.

QUARANTINE LEGISLATION IN THE STATE OF CALIFORNIA.

[By HENRY GIBBONS, JR., M. D., San Francisco, Cal.]

Prior to 1865, it appears that no quarantine laws or special sanitary regulations were adopted. No record of deaths, even, was kept by the authorities, the undertakers alone having charge of that matter.

April 3, 1865, the board of supervisors of San Francisco passed an order providing for a board of health, under whose authority Dr. J. M. McNulty was appointed, October 30, 1865, health officer. He thereupon organized the health office, &c.

April 2, 1865, the legislature passed an act to establish a quarantine for the bay and harbor, and sanitary regulations for the city and county of San Francisco. Under this act, Dr. S. F. Elliott was appointed in June, by the governor, quarantine officer (salary $1,200 per year). Dr. S. F. Elliott was, thus, the first quarantine officer. He was not obliged to board vessels unless cases of contagious diseases were on board, in which event the officers of the vessel were required to anchor their vessel in the stream and to report its condition to the quarantine officer at his office in this city.

In 1868 Dr. C. C. Gordon was appointed quarantine officer by the governor, vice Dr. Elliott, and soon after he was authorized by the board of supervisors to appoint Dr. P. H. Humphrey his assistant, the latter to depend on the fees for his salary and the expenses of boat.

In 1870 the quarantine law was so modified as to give the appointing power to the San Francisco board of health, and to require all vessels to be boarded by the quarantine officer on their arrival in port, and before landing at the wharf.

Under this law Dr. W. H. Rogers became quarantine officer. He was succeeded in 1871 or 1872 by Dr. J. L. Mears, who in turn gave place to Dr. P. H. Humphrey in 1874. Dr. W. F. McAllister followed Dr. Humphrey in July, 1876, and was in August, 1880, succeeded by the present incumbent, Dr. W. M. Lawlor.

The duties of the quarantine officer, fees, charges, &c., are best understood by reference to the quarantine law and reports of health officers, copies of which I will forward.

As regards "location," our quarantine has none—we possess little more than a name. We have been unable to obtain any grounds or appropriation for buildings, but I must add that I do not think that much effort to secure them has been made prior to the present year.

When a vessel arrives in port with cases of small-pox on board, it has been the custom to remove such cases to our small-pox hospital, and to order the vessel out in the stream for a sufficient time, two or three weeks, as will assure us that no other cases are likely to develop. When this period has elapsed the passengers and vessel are purified and fumigated, and the former allowed to land and the latter to discharge cargo. This is the best we can do. It is a serious hinderance to commerce, and entails great expense upon ship-owners. In one instance it cost the Pacific Mail Steamship Company $20,000 or $30,000.

The present San Francisco board of health, in conjunction with the State board, has been endeavoring to obtain a site for quarantine station. We had the assurance of assistance from the National Board and received it, but thus far have accomplished nothing. All of the government locations about the harbor have been considered. Some are not suitable; others are required for purposes of fortification, and the balance for military uses.

A week ago a party consisting of Representative Horace Davis, United States Engineers Mendell and Stewart, and members of the board of health went on a tour of inspection, the principal object being to examine Peninsula Island, the only place the government is likely to give; but we found it rocky, abrupt, and quite unsuitable. Without extensive and expensive grading we could not get a foot of level ground, and although it might be possible to provide for a small hospital and houses for passengers, it would be next to impossibl to find a location for a warehouse for the storage of freight, or buildings for fumigating purposes, &c.

QUARANTINE LAWS OF CALIFORNIA.

SECTION 3004. The quarantine grounds of the bay and harbor of San Francisco are at the anchorage of Sancelito.

SEC. 3005. The board of health for the city and county of San Francisco consists of the mayor of the city and county and four physicians in good standing, residing in the city and county of San Francisco, appointed by the governor, and holding their offices for the term of five years.

SEC. 3009. The board of health must appoint a quarantine officer, who shall be a physician in good standing.

SEC. 3013. Shipmasters bringing vessels into the harbor of San Francisco, and masters, owners, or consignees having vessels in the harbor which have on board any cases of Asiatic cholera, small-pox, yellow, typhus, or ship fever, must report the same, in writing, to the quarantine officer before landing any passengers, casting anchor, or coming to any wharf, or as soon thereafter as they, or either of them, become aware of the existence of either of the diseases on board of their vessels.

SEC. 3014. No captain or other officer in command of any vessel sailing under a register arriving at the port of San Francisco, nor any owner, consignee, agent, or other person, having charge of such vessel must, under a penalty of not less than one hundred dollars, nor more than one thousand dollars, land, or permit to be landed, any freight, passengers, or other persons, from such vessels until he has reported to the quarantine officer, presented his bill of health, and received a permit from that officer to land freight, passengers, or other persons.

SEC. 3015. Every pilot who conducts into the port of San Francisco any vessel subject to quarantine, or examination by the quarantine officer, must—

1st. Bring the vessel no nearer the city than is allowed by law.

2d. Prevent any person from leaving and any communication being made with the vessel under his charge until the quarantine officer has boarded her and given the necessary orders and directions.

3d. Be vigilant in preventing any violation of the quarantine laws, and report without delay all such violations that come to his knowledge to the quarantine officer.

4th. Present the master of the vessel with a printed copy of the quarantine laws, unless he has one.

5th. If the vessel is subject to quarantine, by reason of infection, place at the mast-head a small yellow flag.

SEC. 3016. Every master of a vessel subject to quarantine or visitation by the quarantine officer arriving at the port of San Francisco who refuses or neglects either—

1st. To proceed with and anchor his vessel at the place assigned for quarantine when legally directed to do so; or,

2d. To submit his vessel, cargo, and passengers to the quarantine officer and furnish all necessary information to enable that officer to determine what quarantine or other regulations they ought, respectively, to be subject; or,

3d. To report all cases of disease and of deaths occurring on his vessel, and to comply with all the sanitary regulations of the bay and harbor,

Is liable in the sum of five hundred dollars for every such neglect or refusal.

SEC. 3017. All vessels arriving off the port of San Francisco from ports which have been legally declared infected ports, and all vessels arriving from ports where there is prevailing at the time of their departure any contagious, infectious, or pestilential diseases, or vessels with decaying cargoes, or which have unusually foul or offensive holds, are subject to quarantine, and must be, by the master, owner,

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 4, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Mo ....Saint Louis	331,392	48	123	19.4	9	.....	17	.....	2	8	8	.....	2	.....	1	.....	1	48	6
Kans ....Lawrence	8,500	1	5	30.1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr ....Omaha	30,652	2	6	10.4	.....	.....	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	1	1
Utah ....Salt Lake City	25,000	2	6	12.5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	1
Cal .....San Francisco	233,700	26	83	18.5	18	1	7	.....	1	1	.....	.....	6	.....	.....	.....	.....	.....	.....
Sacramento	21,500	.....	2	4.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	2	4	19.2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,573,048	1,219	2,984	20.9	409	30	524	91	77	107	56	.....	137	11	26	10	32	710	111

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING SEPTEMBER 4, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	203	4	28.6	41.7
R. I .....Providence	100,862	4,000	33	3	17.0	39.1
Del .....Wilmington	38,000	6,000	8	.....	8.8	.....
Md .....Baltimore	338,334	55,412	119	41	17.4	38.7
District of Columbia	120,000	60,000	40	32	17.3	27.8
Va.....Norfolk	15,900	11,300	4	8	13.1	36.8
Richmond	37,970	26,700	12	20	13.3	39.3
S. C .....Charleston	25,000	32,000	10	24	20.8	39.0
Ga .....Savannah	18,229	15,019	13	18	37.1	62.3
Augusta	16,182	10,830	2	12	6.5	56.2
Atlanta	22,000	16,000	7	5	16.6	16.4
Brunswick	1,500	1,400	..	...	.....	.....
Ala .....Mobile	28,000	12,000	11	6	20.5	26.1
Selma	3,425	4,080	2	4	26.6	51.2
Fla .....Jacksonville	6,000	4,000	1	2	8.7	26.1
Miss.....Columbus	2,500	2,247	3	.....	62.6	.....
Natchez	3,500	3,500	3	2	44.7	29.8
La .....New Orleans	159,128	57,231	62	40	20.3	63.8
Shreveport	3,916	4,117	1	4	13.3	51.0
Tenn ....Nashville	27,874	15,669	14	9	25.6	29.7
Clarksville	4,000	3,250	1	1	13.0	16.1
Memphis	16,707	17,293	15	11	47.2	33.2
Ky .....Louisville	153,125	21,875	42	14	14.3	34.4
Ohio .....Portsmouth	10,320	1,000	5	.....	25.3	.....
Iowa ....Keokuk	11,165	960	2	.....	9.3	.....
Kans ....Lawrence	6,800	1,700	4	1	30.7	30.7
Totals	1,540,437	392,583	617	261	20.9	34.7

The following reports for the week ending September 4 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 7; under 5 years, 2; consumption 1, croup 1. Allegheny, Pa., 78,000; deaths, 26; under 5 years, 11; consumption 4, diarrhœa 6, diphtheria 2, enteric fever 1, scarlet fever 1, lung disease 1, puerperal 2, accident 1. Bath, Me., 8,000; deaths, 4; consumption 1, diarrhœa 1. Battle Creek, Mich., 7,500; deaths, 1; under 5 years, 1; diarrhœa 1. Belfast, Me., 5,308; deaths, 2. Boulder, Colo., 3,030; no deaths. Brattleborough, Vt., 6,000; deaths, 1; consumption 1. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years, 1; croup 1. Calais, Me., 6,162; deaths 1; consumption 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 6; under 5 years, 2; consumption 1, diarrhœa 2, enteric fever 2. Circleville, Ohio, 6,400; deaths, 1; under 5 years, 1. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; deaths, 1; under 5 years, 1; diarrhœa 1. Dallas, Tex., 10,300; deaths, 4; consumption 1, enteric fever 2, accident 1. Davenport, Iowa, 23,000; deaths, 9; under 5 years, 6; diphtheria 3, scarlet fever 3. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 360; no deaths. Fernandina, Fla., 3,000; no deaths. Franklin, Ind., 2,700; deaths, 2. Gunn City, Mo., 125; one death, enteric fever 1. Helena, Mont., 3,630; deaths, 1; under 5 years, 1. Hernando, Miss., 1,000; no deaths. Huntingdon, Pa., 4,500; deaths, 2; under 5 years, 1; consumption 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 1; under 5 years, 1; accident 1. Kenosha, Wis., 5,500; deaths, 4; under 5 years, 2; consumption 1, croup 1, diarrhœa 1. La Salle, Ill., 10,000; deaths, 2; consumption 1. Lebanon, Pa., 9,000; deaths, 3; under 5 years, 1; consumption 1, enteric fever 1. Madison, Wis., 9,009; deaths, 6; under 5 years, 4; enteric fever 1, scarlet fever 3. Manitowoc, Wis., 6,510; deaths, 2; under 5 years, 1; diarrhœa 1. Martinsburg, W. Va., 6,534; deaths, 2; diarrhœa 1. Milan, Tenn., 1,800; deaths, 2; under 5 years, 2; diarrhœa 1, enteric fever 1. Milledgeville, Ga., 3,000; no deaths. Monmouth, Ill., 6,000; deaths, 4; under 5 years, 2; consumption 1, lung disease 1. Montgomery, Ala., 17,000; deaths, 5; under 5 years, 2; consumption 2, enteric fever 1, whooping-cough 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 3; consumption 1, malarial fever 1. Muscatine, Iowa, 8,412; deaths, 4; diarrhœa 1, malarial fever 1. Niles, Mich., 4,200; no deaths. Oshkosh, Wis., 17,030; deaths, 8; under 5 years, 2; consumption 3, croup 2, diphtheria 2, accident 1. Painesville, Ohio, 5,500; no deaths. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,092; no deaths. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; no deaths. Port Royal, S. C., 750; deaths, 3; malarial fever 1, accidents 2. Rensselaer, Ind., 901; no deaths. Rock Island, Ill., 12,000; deaths, 4; under 5 years, 3; consumption 1, diarrhœa 1, scarlet fever 1. Santa Cruz, Cal., 5,000; deaths, 1. Springfield, Ohio, 21,000; deaths, 10; under 5 years, 3; diarrhœa 3, enteric fever 2. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 2. Summit, Miss., 1,808; deaths, 1; malarial fever 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; no deaths. Tuscaloosa, Ala., 2,000; deaths, 1; under 5 years, 1. Waxahatchie, Tex., 2,000; no deaths. Wesson, Miss., 2,000; deaths, 1. Winchester, Va., 5,000; deaths, 2; under 5 years, 1; consumption 1, diarrhœa 1. Youngstown, Ohio, 15,089; deaths, 8; under 5 years, 5; diarrhœa 7. Total population, 428,662; deaths under 5 years, 57; total number of deaths, 149; annual rate per 1,000, 18.1.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

Distribution of diseases.—During the summer months there has been a general decline in the death-rate of all pulmonary diseases, that of acute lung diseases having shown the greater reduction. Both classes continue to fall in the Northeast and Southeast sections; but both show an increased rate in the Northwest, which probably results from the earlier change of season in the more elevated portions of that inland section. Croup has increased in all sections, but diphtheria shows a marked decline in the Northwest, with a small increase of mortality in the other sections. The rate of deaths from measles continues to fall in all parts of the country, and scarlet fever has advanced only in the Northwest. Whooping-cough has begun to fall in its rate of mortality for all sections, the most marked decline being in the Southeast, where the disease had spread extensively, and in July reached a death-rate of 0.50; it falls to 0.40 this month. The increase of enteric fever, noted last month, still continues in all sections of the country, the advance being most marked in the Northwest; this may be ascribed to the earlier change of season in that section, as referred to in connection with the increase of mortality from acute lung diseases, enteric fever being notably an autumnal disease in this country. Malarial fevers being in the same class, as to season, a general increase is noted in all sections, being most marked in the Northeast and Northwest, where the temperature required to develop the cause appeared latest. The change of death-rate from diarrhœal and other summer diseases does not necessarily follow the temperature in their decline so closely as in their inception, many deaths occurring from a sudden fall of temperature acting upon subjects previously prepared by the exhausting effects of the heat. The reduction of death-rate from diarrhœal diseases has been greatest in the Northeast, where it had been highest. Since July the rate has fallen 40 per cent. in that section, 30 per cent. in the Southeast, and 20 per cent. in the Northwest. It has been noted that other influences than temperature control the movement of this class of diseases. The epidemic of small-pox at Camden, N. J., has furnished 24 out of the 39 deaths reported; Philadelphia reports 13, and Chicago and San Francisco report 1 each. A report of Asiatic cholera in Erie, Pa., caused some alarm, but no case of that disease has been proved to exist in the country this season. Indiana, Tennessee, and adjoining States have reported extensive prevalence of typho-malarial fevers, but usually not of very fatal type. No yellow fever has appeared at any of the exposed points of the coast, the few deaths reported during the month having occurred on infected vessels or in quarantine hospitals. The fever known as *dengue* has prevailed along the Lower Mississippi and the Gulf coast and in Charleston, S. C., but the mortality was generally small.

ORIGIN AND GROWTH OF THE QUARANTINES OF THE SEA-BOARD STATES OF THE UNITED STATES.

QUARANTINE LEGISLATION IN THE STATE OF CALIFORNIA.

[By HENRY GIBBONS, JR., M. D., San Francisco, Cal.]

Prior to 1865, it appears that no quarantine laws or special sanitary regulations were adopted. No record of deaths, even, was kept by the authorities, the undertakers alone having charge of that matter.

April 3, 1865, the board of supervisors of San Francisco passed an order providing for a board of health, under whose authority Dr. J. M. McNulty was appointed, October 30, 1865, health officer. He thereupon organized the health office, &c.

April 2, 1865, the legislature passed an act to establish a quarantine for the bay and harbor, and sanitary regulations for the city and county of San Francisco. Under this act, Dr. S. F. Elliott was appointed in June, by the governor, quarantine officer (salary $1,200 per year). Dr. S. F. Elliott was, thus, the first quarantine officer. He was not obliged to board vessels unless cases of contagious diseases were on board, in which event the officers of the vessel were required to anchor their vessel in the stream and to report its condition to the quarantine officer at his office in this city.

In 1868 Dr. C. C. Gordon was appointed quarantine officer by the governor, vice Dr. Elliott, and soon after he was authorized by the board of superyisors to appoint Dr. P. H. Humphrey his assistant, the latter to depend on the fees for his salary and the expenses of boat.

In 1870 the quarantine law was so modified as to give the appointing power to the San Francisco board of health, and to require all vessels to be boarded by the quarantine officer on their arrival in port, and before landing at the wharf.

Under this law Dr. W. H. Rogers became quarantine officer. He was succeeded in 1871 or 1872 by Dr. J. L. Mears, who in turn gave place to Dr. P. H. Humphrey in 1874. Dr. W. F. McAllister followed Dr. Humphrey in July, 1876, and was in August, 1880, succeeded by the present incumbent, Dr. W. M. Lawlor.

The duties of the quarantine officer, fees, charges, &c., are best understood by reference to the quarantine law and reports of health officers, copies of which I will forward.

As regards "location," our quarantine has none—we possess little more than a name. We have been unable to obtain any grounds or appropriation for buildings, but I must add that I do not think that much effort to secure them has been made prior to the present year.

When a vessel arrives in port with cases of small-pox on board, it has been the custom to remove such cases to our small-pox hospital, and to order the vessel out in the stream for a sufficient time, two or three weeks, as will assure us that no other cases are likely to develop. When this period has elapsed the passengers and vessel are purified and fumigated, and the former allowed to land and the latter to discharge cargo. This is the best we can do. It is a serious hinderance to commerce, and entails great expense upon ship-owners. In one instance it cost the Pacific Mail Steamship Company $20,000 or $30,000.

The present San Francisco board of health, in conjunction with the State board, has been endeavoring to obtain a site for quarantine station. We had the assurance of assistance from the National Board and received it, but thus far have accomplished nothing. All of the government locations about the harbor have been considered. Some are not suitable; others are required for purposes of fortification, and the balance for military uses.

A week ago a party consisting of Representative Horace Davis, United States Engineers Mendell and Stewart, and members of the board of health went on a tour of inspection, the principal object being to examine Peninsula Island, the only place the government is likely to give; but we found it rocky, abrupt, and quite unsuitable. Without extensive and expensive grading we could not get a foot of level ground, and although it might be possible to provide for a small hospital and houses for passengers, it would be next to impossibl to find a location for a warehouse for the storage of freight, or buildings for fumigating purposes, &c.

QUARANTINE LAWS OF CALIFORNIA.

SECTION 3004. The quarantine grounds of the bay and harbor of San Francisco are at the anchorage of Saucelito.

SEC. 3005. The board of health for the city and county of San Francisco consists of the mayor of the city and county and four physicians in good standing, residing in the city and county of San Francisco, appointed by the governor, and holding their offices for the term of five years.

SEC. 3009. The board of health must appoint a quarantine officer, who shall be a physician in good standing.

SEC. 3013. Shipmasters bringing vessels into the harbor of San Francisco, and masters, owners, or consignees having vessels in the harbor which have on board any cases of Asiatic cholera, small-pox, yellow, typhus, or ship fever, must report the same, in writing, to the quarantine officer before landing any passengers, casting anchor, or coming to any wharf, or as soon thereafter as they, or either of them, become aware of the existence of either of the diseases on board of their vessels.

SEC. 3014. No captain or other officer in command of any vessel sailing under a register arriving at the port of San Francisco, nor any owner, consignee, agent, or other person, having charge of such vessel must, under a penalty of not less than one hundred dollars, nor more than one thousand dollars, land, or permit to be landed, any freight, passengers, or other persons, from such vessels until he has reported to the quarantine officer, presented his bill of health, and received a permit from that officer to land freight, passengers, or other persons.

SEC. 3015. Every pilot who conducts into the port of San Francisco any vessel subject to quarantine, or examination by the quarantine officer, must—

1st. Bring the vessel no nearer the city than is allowed by law.

2d. Prevent any person from leaving and any communication being made with the vessel under his charge until the quarantine officer has boarded her and given the necessary orders and directions.

3d. Be vigilant in preventing any violation of the quarantine laws, and report without delay all such violations that come to his knowledge to the quarantine officer.

4th. Present the master of the vessel with a printed copy of the quarantine laws, unless he has one.

5th. If the vessel is subject to quarantine, by reason of infection, place at the mast-head a small yellow flag.

SEC. 3016. Every master of a vessel subject to quarantine or visitation by the quarantine officer arriving at the port of San Francisco who refuses or neglects either—

1st. To proceed with and anchor his vessel at the place assigned for quarantine when legally directed to do so; or,

2d. To submit his vessel, cargo, and passengers to the quarantine officer and furnish all necessary information to enable that officer to determine what quarantine or other regulations they ought, respectively, to be subject; or,

3d. To report all cases of disease and of deaths occurring on his vessel, and to comply with all the sanitary regulations of the bay and harbor,

Is liable in the sum of five hundred dollars for every such neglect or refusal.

SEC. 3017. All vessels arriving off the port of San Francisco from ports which have been legally declared infected ports, and all vessels arriving from ports where there is prevailing at the time of their departure any contagious, infectious, or pestilential diseases, or vessels with decaying cargoes, or which have unusually foul or offensive holds, are subject to quarantine, and must be, by the master, owner,

pilot, or consignee, reported to the quarantine officer without delay. No such vessel must cross a right line drawn from Meiggs' Wharf to Alcatraz Island until the quarantine officer has boarded her and given the order required by law.

SEC. 3018. The quarantine officer must board every vessel subject to quarantine or visitation by him immediately on her arrival, make such examination and inspection of vessel, books, papers, or cargo, or of persons on board, under oath, as he may judge expedient, and determine whether the vessel should be ordered to quarantine, and if so the period of quarantine.

SEC. 3019. No captain or other officer in command of any passenger-carrying vessel of more than one hundred and fifty tons burden, nor of any vessel of more than one hundred and fifty tons burden having passengers on board, nor any owner, consignee, agent, or other person having charge of such vessel or vessels must, under a penalty of not less than one hundred dollars nor more than one thousand dollars, land or permit to be landed any passenger from the vessel until he has presented his bill of health to the quarantine officer and received a permit from that officer to land such passenger, except in such cases as the quarantine officer deems it safe to give the permit before seeing the bill of health.

SEC. 3020. The following fees may be collected by the quarantine officer: For giving a permit to land freight or passengers, or both, from any sailing vessel of less than five hundred tons burden from any port out of this State, two dollars and fifty cents; over five hundred and under one thousand tons burden, five dollars; each additional one thousand tons burden, or fraction thereof, an additional two dollars and fifty cents. For steam vessels propelled in whole or in part by steam, of one thousand tons burden or less, five dollars, and two dollars and fifty cents for each additional one thousand tons burden, or fraction thereof; but vessels not propelled in whole or in part by steam, sailing to and from any port or ports of the Pacific States, of the United States, or Territories, and whaling vessels entering the harbor of San Francisco, are excepted from the provisions of this section.

SEC. 3021. The board of health may enforce compulsory vaccination on passengers in infected ships, or coming from infected ports.

SEC. 3022. The board of health may provide suitable hospitals, to be situated at or near Saucelito, and furnish or supply the same.

RESOLUTIONS OF BOARD OF HEALTH.

Resolved, That all vessels arriving from China be required to come to anchor in the bay, and that all passengers be mustered on deck in presence of the quarantine officer, and be subjected to a personal examination by him before being permitted to land. (Passed May 26, 1873.)

Resolved, That all vessels arriving at this port be examined by the quarantine officer, except those coming from ports in this State, and those lying north. (Passed May 26, 1876.)

QUARANTINE REGULATIONS FOR GEORGIA AND FLORIDA.

NOTICE TO PILOTS.

ST. AUGUSTINE, FLA., *August* 18, 1880.

Pilots will, in all cases, before boarding, make inquiries as to the sanitary condition of the vessel destined for this port. Vessels with sickness on board, or on which serious cases have occurred during the voyage, will be ordered to proceed at once to the national quarantine station at Sapelo.

All other vessels will be brought to at the quarantine station at the north end of Anastalia Island or Black Point, for examination by quarantine officer of this port.

GEO. S. GREENE,
Mayor of St. Augustine and President of the Board of Health.

MAYOR'S OFFICE, JACKSONVILLE, FLA.,
August 18, 1880.

Pilots will, in all cases, *before boarding*, make inquiry as to the sanitary condition of the vessels destined for this port.

Vessels with sickness on board or on which serious cases have occurred during the voyage will be ordered to proceed at once to the national quarantine station at Sapelo.

All other vessels will be governed by the quarantine laws now in force.

By order of the board of health.

J. RAMSEY DEY,
President Board of Health and Mayor of Jacksonville.

(Copy, assumed as correct by W. H. Elliott.)

OFFICE BOARD COUNTY COMMISSIONERS,
Darien, Ga., September 4, 1880.

Pilots will, in all cases, *before boarding*, make inquiry as to the sanitary condition of the vessels destined for this port. Vessels with cases of sickness on board, or on which serious cases have occurred during the voyage, will be ordered to proceed at once to the national quarantine station at Sapelo. All other vessels will be brought to, as at present required by the port physician, at Doboy Island.

By order of the board.

SPALDING KENAN, *Clerk.*

CHARLESTON, S. C.—Dr. F. P. Porcher, under date of September 16, gives the following account of the "break-bone" fever in that city:

At your request we furnish a brief sketch of the comparatively mild epidemic of break bone fever which still prevails in this city. In the opinion of some of the physicians who have taken a retrospective glance, some cases were seen as early as the end of June last, though the disease was not generally recognized till some four weeks since.

It began, it appears, in the extreme northwestern portion of the city, above Calhoun, near Line and Columbus street, in what was formerly called the "Neck." Afterwards it seemed to progress into the lower or oldest part, and there is every indication that it is now diminishing.

The earth had been disturbed in the paving of King street, an extensive thoroughfare running north and south the entire length of the city; and the special section of the city where the first cases were noticed was not in as good a condition as others, being near the marshes and new streets having been opened there; but though we were at first inclined to search for the causes of disease in these conditions, the simultaneous appearance of the fever in the west, and as we learn in Savannah and Augusta, must exclude such a supposition, and refer it to general and wide-prevailing atmospheric influences.

Besides our own experience, which has been limited on account of temporary absence, we have made diligent inquiries of many persons, of physicians as well as the laity, and learn the following particulars, which we present in default of a more complete report, which will doubtless be made in future.

The symptoms vary exceedingly—some being present and some absent—as follows: The disease generally begins with a feeling of coldness, or by a chill, followed by fever—this, with a temperature ranging from 100° to 105°, lasts generally from 24 to 48 hours, occasionally extending to four or five days, and even in rare cases to seven. Relapses occasional, specially in those who have gone out too early. Headache frequent, generally frontal, from the beginning. Miliary eruptions, sometimes elevated and red, like measles, and the occasional presence of *sudamina over the face, neck, and body;* sometimes the eruptions were confined to the body, and endured for days after recovery. We have seen some examples of slight desquamation—furfurations or branny in character. Sweating profuse in many persons, though *often absent*. Hence, some physicians are inclined to consider the disease to be *suette miliare* of a mild form. "Break-bone" is the best name, because pain in the bones and limbs is the most constant symptom. There is often great restlessness during the fever, and in some a feeling of tightness or congestion about the throat, with bleeding in a few cases known to us. Catarrhal symptoms are rarely present, although cough has occasionally existed. Bleeding from the nose not unusual in children, and also increase in the menstrual molimen has been observed. Pain in the back and limbs markedly present, but no decided swelling of joints, no carbuncular enlargements or boils, as in the epidemic of Dengue, of 40 years since, or in that of "break-bone," which followed some years subsequently. Weakness and prostration have been very decided, but not nearly to such an extent as in previous epidemics. Some of the physicians consider that there has been a tendency to hepatic torpor or congestion, of no great severity, however. We have heard of no cases of decided jaundice. Nausea and vomiting seldom occur.

The disease does not affect all the members of a household, oftentimes only one or two being seized, though we have known six to be taken in one house; in this respect differing from the dengue, as described by Prof. Dickson, and from the epidemic seen by us some thirty years since. Then 10,000 were down; no one was well enough or strong enough to help his neighbor, and one had to learn to walk over again.

It is difficult to calculate the number who have suffered, as very many have not employed a physician; from 2,000 to 3,000, perhaps, approximates the number.

Very little active treatment has been used; as far as we can learn, as follows: A mild laxative, saline or mercurial, hot teas, niter, pediluvia, synapisms, &c., and quinine during and after the attack, upon theoretical grounds, with occasionally mild stimulants. Several persons have recovered with no treatment whatever.

It has prevailed among both races, perhaps equally, and *not a single death is ascribed to this disease* as far as we can learn. The only disadvantage which accrues to those who take it is the time lost and the temporary pain and weakness from which they suffer.

Persons who were in the city and who visited the country had mild attacks. We know of four such; one of these had reached Asheville, N. C., where we saw him. Cases of the fever have occured in

Summerville, thirty miles off, on the line of the South Carolina Railroad, among persons who had never visited the city; others sickened there who had paid flying visits, remaining a part of a day only.

How different all this is from yellow fever, in which a fever of far less apparent intensity produces great changes in the blood and tissues, black vomit, albuminuria, and frequent deaths.

We append the bill of mortality for Charleston for the week ending Septe nber 11:

"BILL OF MORTALITY.—Return of deaths within the city of Charleston for the week ending September 11, 1880: Whites 7, blacks and colored 18—total 25, excluding 3 still-borns, all colored. Under 1 year of age, 2 white and 9 colored; between 1 and 5, 3 colored; between 5 and 10, 1 colored; between 10 and 20, 2 colored; between 30 and 40, 1 white and 2 colored; between 40 and 50; 2 white; between 60 and 70, 1 white; between 70 and 80, 1 white and 1 colored."

Dr. John T. Nagle makes the following report of the mortality in the city of New York, for the second quarter of the year 1880:

I have the honor to report that the total number of deaths for the three months ending June 30, 1880, was 8,632, which is an increase of 2,026, compared with the number of deaths during the corresponding three months of 1879, and represents an annual death rate of 28.68 per 1,000 of the population (according to the United States census of June, 1880, which was 1,203,823).

The increase of the mortality during the second quarter of 1880, compared with the second quarter of 1879, was from the following diseases, viz: Measles, 115; diphtheria, 90; membranous croup, 92; typhoid fever, 13; typhus fever, 1; puerperal diseases, 24; diarrhœal diseases, 891; alcoholism, 18; cancers, 32; phthisis pulmonalis, 84; bronchitis, 99; pneumonia, 264; diseases of the heart, 17; marasmus and scrofula, 57; meningitis and encephalitis, 58; convulsions (infantile), 58; sunstroke, 52; apoplexy, 37; all diseases of the nervous system, 201; Bright's disease and nephritis, 45. The deaths by suicide exceeded by 16 and drowning by 31 the number that took place during the corresponding quarter of 1879, and the deaths of inmates of public institutions were 389, and of residents of tenement houses* 1,195 more than the number reported for the second quarter of 1879. The deaths of children under 5 years of age were 4,195, whereas in the corresponding quarter of 1879 there were but 2,853 deaths at the same age. The mean temperaturet for April was 50°.02 Fahr.; for May, 67°.91 Fahr., and for June, 73°.14 Fhr. The depth of rain-fall by inches in April was 2.90; May, 0.62, and June, 1.14; and the velocity of the wind by miles was 5,202 in April; 4,415 in May, and 4,305 in June. The causes which tended to increase the mortality of the second quarter of this year are chiefly attributed to the increase in population and the high temperature, the range being as high as 96° Fahr. on May 27, at 4 p. m., and 95° each on May 25 and 26, at 4 and 5 p. m., respectively, and on June 25 and 28 at 94° at 4 p. m. The deaths from diarrhœal diseases of children under 5 years of age in April were 40; May, 101, and in June they arose to 1,120. The deaths in tenement houses were 1,254 in April; 1,406 in May, and 1,999 in June. The total deaths from zymotic diseases during the three months was 2,580, against 1,683 for the second quarter of 1879. The total number of deaths during the second quarter of 1880 from small-pox was 2 (both immigrants sent from quarantine hospital); measles, 164; scarlatina, 114; diphtheria, 218; membranous croup, 175; whooping cough, 68; typhus fever, 1; typhoid fever, 42. The highest daily mortality occurred on the 26th of June (232), and the lowest on the 9th of June (58). The highest number of deaths of children under 5 years of age was on June 25 (175), and the lowest number was on April 21 (21).

* Houses which contain more than 3 families living separately.

† From New York Meteorological Observatory, Central Park, D. Draper, Ph. D., director.

Comparative table of mortality from the principal causes of death in the second quarter of the year 1880, with the corresponding quarter of the preceding five years.

Causes of death.	1880.	1875.	1876.	1877.	1878.	1879.	Total for 5 years preceding 1880.	Average for 5 years preceding 1880.
Total deaths from all causes	8,632	7,064	6,704	6,047	6,334	6,606	32,755	6,551.0
Total zymotic diseases	2,580	2,165	1,986	1,560	1,567	1,683	8,961	1,792.2
Total constitutional diseases	1,726	1,496	1,454	1,403	1,564	1,521	7,438	1,487.6
Total local diseases	3,384	2,625	2,523	2,423	2,564	2,652	12,787	2,557.4
Total developmental diseases	510	437	437	361	374	470	2,079	415.8
Deaths by violence	432	341	304	300	265	280	1,490	298.0
Small-pox*	2	462	100	8	1	11	582	116.4

* Both immigrants, sent from Quarantine Hospital.

Comparative table of mortality, &c.—Continued.

Causes of death.	1880.	1875.	1876.	1877.	1878.	1879.	Total for 5 years preceding 1880.	Average for 5 years preceding 1880.
Measles	164	45	134	52	107	49	387	77.4
Scarlatina	114	161	341	314	277	464	1,557	311.4
Diphtheria	218	549	474	196	243	128	1,590	318.0
Membranous croup	175	160	112	96	120	83	571	114.2
Whooping-cough	68	98	98	85	88	153	522	104.4
Typhus fever	1	8	5	2	3	.....	18	3.6
Typhoid fever	42	60	54	46	29	29	218	43.6
Puerperal diseases	133	98	89	62	85	109	443	88.6
Diarrhœal diseases of children under five years	1,261	248	341	413	346	405	1,753	350.6
Diarrhœal diseases of all ages	1,349	290	383	464	389	458	1,984	396.8
Alcoholism	54	33	29	28	25	36	151	30.2
Cancer	172	116	114	112	148	141	631	126.2
Phthisis pulmonalis	1,110	1,035	992	996	1,053	1,026	5,102	1,020.4
Bronchitis	371	258	253	225	303	272	1,311	262.2
Pneumonia	878	692	672	552	614	614	3,144	628.8
Heart diseases	292	257	237	214	267	275	1,250	250.0
Marasmus—tabes mesenterica and scrofula	170	108	111	90	127	113	549	109.8
Hydrocephalus and tubercular meningitis	176	155	162	145	182	172	816	163.2
Meningitis and encephalitis	188	188	198	144	130	130	790	158.0
Convulsions	218	171	128	184	161	160	804	160.8
Direct effect of solar heat	58	9	7	3	5	7	31	6.2
Apoplexy	145	85	105	95	106	108	499	99.8
All diseases of the brain and nervous system	709	622	584	618	561	598	2,983	596.6
Bright's disease and nephritis	377	261	281	291	306	332	1,471	294.2
Deaths by suicide	56	56	46	44	29	40	215	43.0
Deaths by drowning	91	74	67	69	52	58	320	64.0
Deaths in institutions	1,538	1,423	1,204	1,094	1,136	1,149	6,006	1,201.2
Deaths of persons seventy years old and over	518	402	390	397	435	402	2,026	405.2
Deaths of children under one year of age	2,718	1,646	1,624	1,516	1,542	1,628	7,956	1,591.2
Deaths of children under two years of age	3,556	2,295	2,312	1,987	2,129	2,183	10,906	2,181.2
Deaths of children under five years of age	4,195	3,107	3,112	2,586	2,829	2,853	14,487	2,897.4

Comparative mortality in New York City from the principal causes of death, by months, for the half year 1879 and 1880.

[Population (estimated) July 1, 1879, 1,174,019; annual death-rate per 1,000 inhabitants, 24.16. Population, census of 1880, 1,203,823; annual death-rate per 1,000 inhabitants, 25.66.]

Causes of death.		Jan.	Feb.	Mar.	Apr.	May.	June.
Total deaths from all causes	1879	2,706	2,276	2,594	2,255	2,091	2,260
	1880	2,302	2,184	2,328	2,473	2,624	3,535
Total zymotic diseases	1879	642	544	630	484	471	728
	1880	491	466	455	488	557	1,535
Total constitutional diseases	1879	567	534	590	543	490	488
	1880	558	535	628	566	568	592
Total local diseases	1879	1,213	976	1,146	982	884	786
	1880	997	969	996	1,148	1,188	1,048
Total developmental diseases	1879	202	155	173	169	150	151
	1880	166	141	168	161	168	181
Deaths by violence	1879	82	67	85	77	96	107
	1880	90	73	81	110	143	179
Small-pox	1879	.....	.....	..	2	1	8
	1880	.....	.....	.....	.....	2*	.....
Measles	1879	.....	1	4	12	11	26
	1880	100	92	69	73	70	21
Scarlatina	1879	251	225	254	186	159	119
	1880	34	33	25	38	46	30
Diphtheria	1879	97	69	58	36	46	46
	1880	72	77	65	81	76	61
Membranous croup	1879	46	44	50	31	32	20
	1880	70	72	70	68	54	53
Whooping-cough	1879	67	61	91	59	54	40
	1880	33	24	25	22	20	26
Erysipelas	1879	18	11	19	17	15	12
	1880	24	21	22	22	17	22
Typhus fever	1879	.....	.....	.....	.....	.....	.....
	1880	.....	.....	..	.....	.....	1
Typhoid fever	1879	18	10	7	11	9	9
	1880	10	17	17	16	12	14
Cerebro-spinal fever	1879	9	7	7	8	9	14
	1880	11	5	18	19	20	18
Puerperal diseases	1879	30	47	44	53	34	22
	1880	40	33	37	49	42	42
Remittent, intermittent, typho-malarial, congestive, and simple continued fevers	1879	33	24	23	26	25	31
	1880	28	27	28	33	44	31
Diarrhœal diseases of children under five years	1879	20	17	34	27	43	335
	1880	26	31	37	40	101	1,120
Diarrhœal diseases, all ages	1879	39	35	53	44	59	355
	1880	43	38	47	47	115	1,187
Inanition, want of breast-milk, &c.	1879	19	12	19	13	22	10
	1880	18	16*	22	18	27	23
Alcoholism	1879	22	11	13	9	14	13
	1880	19	14	19	18	20	16

* Both immigrants, sent from Quarantine Hospital.

Comparative mortality in New York City, &c.—Continued.

Causes of death.		Jan.	Feb.	Mar.	Apr.	May.	June.
Rheumatism and gout	1879	15	16	15	14	19	15
	1880	16	12	17	19	28	20
Cancer	1879	44	42	48	50	44	47
	1880	45	54	67	55	62	55
Phthisis pulmonalis	1879	417	389	408	393	332	301
	1880	402	375	412	394	365	351
Bronchitis	1879	159	130	145	114	95	63
	1880	106	122	140	138	131	102
Pneumonia	1879	341	251	330	274	214	126
	1880	261	248	266	375	340	163
Heart diseases	1879	115	137	121	102	80	93
	1880	123	93	104	99	99	94
Aneurism	1879	12	7	8	11	8	2
	1880	8	5	6	8	3	5
Marasmus, tabes mesenterica, and scrofula	1879	27	31	43	26	37	50
	1880	36	37	49	36	51	83
Hydrocephalus and tubercular meningitis	1879	58	52	73	51	51	70
	1880	54	49	76	49	50	77
Meningitis and encephalitis	1879	60	57	60	37	46	47
	1880	44	51	61	53	60	75
Convulsions	1879	82	52	61	43	55	62
	1880	56	54	53	62	84	72
Direct effect of solar heat	1879	.....	.....	.....	.....	.....	7
	1880	.....	.....	.....	.....	23	35
Cirrhosis of liver and hepatitis	1879	21	19	20	28	23	21
	1880	19	24	23	19	21	32
All diseases of the brain and nervous system	1879	245	192	230	175	203	220
	1880	218	200	229	221	294	294
Apoplexy	1879	50	29	43	30	39	39
	1880	53	43	55	48	55	42
Enteritis, gastro-enteritis, peritonitis, and gastritis	1879	33	34	40	34	40	39
	1880	37	36	46	40	54	117
Bright's disease and nephritis	1879	144	113	119	111	120	101
	1880	107	106	87	127	123	127
Cyanosis and atelectasis	1879	27	32	33	21	18	23
	1880	15	19	13	20	22	14
Deaths by suicide	1879	8	12	9	12	16	12
	1880	9	8	9	18	20	18
Premature and preternatural births	1879	69	33	49	60	52	59
	1880	57	49	71	56	61	68
Deaths by drowning	1879	3	2	5	11	23	24
	1880	5	6	11	15	44	32
Surgical operations	1879	4	7	1	2	1	4
	1880	5	6	3	5	6	6
Deaths in institutions	1879	406	388	385	400	383	366
	1880	392	372	431	471	524	543
Deaths of persons 70 years old and over	1879	249	172	188	159	146	97
	1880	193	161	153	190	182	146
Deaths of children under 1 year old	1879	504	433	588	444	461	723
	1880	477	446	536	523	685	1,510
Deaths of children under 2 years old	1879	738	629	816	625	625	933
	1880	665	660	760	736	910	1,910
Deaths of children under 5 years old	1879	1,054	924	1,119	860	855	1,138
	1880	908	875	977	963	1,131	2,101

* This case was sent from Quarantine Hospital to Riverside Hospital, where death occurred. The patient came in the steamship *Mikado*, and was never vaccinated.

ABSTRACTS FROM CONSULAR REPORTS.

AMOY, CHINA.—United States Consul W. E. Goldsborough reports, under date of July 10, that the sanitary condition of this city is not good, the drainage and cleansing being defective. This is not the case on the island of Koolangsoo, in the harbor, where the foreign population, numbering about 300, reside. On this island the mean temperature in July is 86°; in winter it ranges from 45° to 68°. The year may be divided into three periods—five months of fine weather, three of wet, and four of variable weather. The mean annual rainfall is about 44 inches. The water is abundant and good, and is carried over to Amoy for sale. The population of Amoy is stated at 300,000. No returns of deaths can be obtained.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys reports 61 deaths in July, being at an annual rate of 36.6 per 1,000. No contagious diseases reported. Mean temperature, 83.5.

BORDEAUX, FRANCE.—United States Consul L. A. Price reports 460 deaths for the month of July; population, 215,140; annual death-rate, 25.7 per 1,000. Mean temperature for the month, 72°. There were 15 deaths from small-pox, 5 from typhoid fever, and 26 from other contagious diseases.

CARDIFF, WALES.—United States Consul W. Sikes notes a correction madeby the health officer in the number of deaths for the week ending August 14. It should have been given as 30, instead of 40. During the week ending August 21 there were 35 deaths—one from scarlet fever being the only one from any contagious disease.

FOOCHOW, CHINA.—United States Consul J. C. Wingate reports no epidemic or contagious disease during the three weeks ending July 10. The sanitary condition of the foreign settlement is good, but that of the city is bad. The population of the city is supposed to be 600,000, with 500,000 in the suburbs.

JAPAN.—Dr. Thomas H. Streets, U. S. N., sends the health report of Kanagawa district for July, recording 2 cases of choleraic diarrhœa, typhoid fever 3 cases and 1 death, and 144 deaths from causes not reported.

MALTA AND GOZO.—For the two weeks ending August 15 the report shows 162 deaths; population, 153,508; annual death-rate, 25.7 per 1,000. The following causes of death are noted: Small-pox, 1; enteric fever, 1; dysentery, 6; diarrhœa, 7; consumption, 8; other lung diseases, 5; still-born, 6, not included in the mortality.

MESSINA, SICILY.—The report for the month of May gives 4 deaths from typhoid fever and 27 from other contagious diseases. The total mortality was 197, in a population of 77,293, giving an annual rate of 30.6 per 1,000. Diphtheria, enteric fever, and consumption are noted as the prevailing diseases.

MOSCOW, RUSSIA.—United States Consul A. Weber reports a death-rate of 48.6 per 1,000 per annum for the month of June, the number of deaths being 2,411. Of these, 470 were from diseases of the respiratory organs, and 835 from those of the digestive system. In May, the death-rate was 44.1, the deaths being 2,216, of which 595 were from respiratory and 423 from digestive disease. Small-pox caused 13 deaths in May and 18 in June; typhoid fever, 164 in May and 126 in June. Mean temperature for May, 55°.

NEW ZEALAND.—The report for the month of June shows a total of 103 deaths in the four chief boroughs. Aggregate population 75,720, and annual death-rate 16.3. Of the 103 deaths, the following causes are noted: Scarlet fever 1, diphtheria 2, whooping-cough 1, enteric fever 2, diarrhœa 3, consumption 12, diseases of the nervous system 13, of the heart 5, of the respiratory system 10, of the digestive system 7, deaths by violence 13.

NINGPO, CHINA.—United States Consul E. C. Lord sends reports for the three weeks ending July 17. During this period the health of the district had been fair, and no contagious diseases are noted.

SANTA CRUZ, TENERIFFE.—United States Consul W. H. Dabney reports for the month of July 30 deaths; of which consumption caused 6, typhoid fever 5, diarrhœal diseases 6, and bronchitis 2. There were 12 deaths under 5 years and 6 over 60 years of age. Births during the month, 33.

SANTA MARTHA, UNITED STATES OF COLOMBIA.—The reports for the two weeks ending July 24 state that the number of deaths cannot be ascertained; no contagious disease prevails, intermittent fever being the most common complaint.

SANTIAGO DE CUBA.—United States Consul J. C. Landreau reports for the month of July 136 deaths from yellow fever, 49 from small-pox, and 12 from typhoid fever. The cases of yellow fever were mostly among the Spanish troops; and the harbor and vicinity being free from the disease clean bills of health were issued.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

SAN ANTONIO, TEX.—Dr. D. R. Menger, city physician, makes the following remarks, under date of August 29 and 31:

The population of San Antonio is estimated by the late census at 20,697, a large proportion being Mexicans, negroes, and foreigners. The city is situated in a valley, on both sides of the San Antonio River. The central portions of the city are well built and inhabited by Americans, while the southwest part is composed chiefly of the Mexican *jacals* or huts, made of a few posts and reeds, and plastered with clay. These huts have no ventilation, save through the doors, the chimney, and sometimes one window. Disease is rife among this population, and they frequently conceal the existence of cases of small-pox and other contagious diseases. From this fact, the estimate of deaths and number of cases of small-pox in the recent epidemic was probably too low. The negroes are much better housed than the Mexicans. The water-supply of the city is generally good, but the hydrants supply only the better class of the population, while the lower class have to use water from ditches and wells, often polluted with filth of all kinds. The natural drainage of the city is good, but the drains are in many places obstructed by weeds and offal, and are only cleansed by the sudden and heavy rains which often occur in summer. The rains, however, injure the sanitary condition of some localities, by forming pools of stagnant water. The privy system is defective, and the advantage of cement lining to privy-vaults is strongly urged, as preventing leakage into wells and cisterns.

VIDALIA, LA.—Dr. J. S. Meng reports, under date of September 11, that there have been eleven cases of dengue fever in that town. The population is estimated at 700.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 11, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ....Portland	34,000	1	10	15.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H. ..Concord	14,000	2	5	18.5	1	....	1	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt .....Burlington	10,500	4	5	15.8	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Mass ....Boston	375,000	79	154	21.4	23	1	46	5	4	.....	.....	.....	10	.....	1	.....	1	59	8
Cambridge	52,800	8	16	14.5	3	.....	2	.....	2	.....	.....	.....	1	.....	.....	.....	.....	4	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,000	5	13	25.3	3	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....
Newburyport	13,800	4	6	22.3	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	2	4	27.9	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	2	2	14.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	28	37	39.4	.....	.....	3	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Lowell	59,340	23	36	31.5	4	.....	15	.....	1	.....	.....	.....	1	.....	.....	.....	2	18	1
Lawrence	39,000	6	18	24.1	5	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,000	12	26	23.3	3	.....	7	1	2	.....	1	.....	2	.....	.....	.....	1	.....	.....
Lynn	38,400	11	22	30.0	3	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Brockton	13,608	2	4	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,610	....	1	13.6	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,200	.....	1	5.7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	2	3	14.4	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,600	3	5	20.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	12	14	29.2	.....	.....	6	.....	.....	.....	1	.....	1	.....	.....	.....	.....	7	.....
Springfield	33,000	3	9	14.2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
R. I.....Providence	104,862	17	38	18.9	5	.....	8	....	1	.....	2	.....	2	....	1	.....	...	12	1
Conn ....New Haven	63,000	10	20	16.3	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	3	1
New Britain	14,000	3	7	25.9	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,300	7	9	23.4	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. Y.....New York	1,203,823	255	569	24.6	85	10	100	32	4	14	5	....	55	....	4	.....	6	189	27
Brooklyn	564,448	137	255	23.6	35	1	56	21	3	9	3	.....	15	.....	2	.....	4	103	6
Yonkers	19,000	3	8	22.0	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Newburg	18,043	3	7	20.3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rochester	90,000	.....	32	18.6	4	.....	6	2	.....	.....	.....	.....	2	.....	.....	.....	.....	8	2
Cambridge	1,850	.....	1	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Jervis	10,000	.....	2	10.4	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarrytown	3,276	.....	1	15.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J .....Hudson County	209,000	42	85	21.2	7	2	14	3	.....	2	3	.....	6	.....	5	.....	.....	25	5
Newark	138,000	23	54	21.7	12	.....	5	1	4	1	.....	.....	2	....	.....	.....	....	9	2
Orange	13,213	2	3	12.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Camden	41,704	11	20	25.0	3	.....	5	.....	1	.....	.....	.....	2	.....	....	4	.....	.....	7
Plainfield	8,000	1	3	19.6	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa .....Philadelphia	850,000	61	302	18.5	40	5	20	7	9	.....	1	....	5	.....	.....	7	2	.....	.....
Pittsburgh	156,649	28	49	16.1	2	.....	6	6	3	....	3	.....	2	.....	.....	.....	.....	12	1
Erie	28,565	5	7	13.0	.....	.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	2	.....
Del .....Wilmington	44,000	3	23	27.2	1	11	1	1	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....
Md .....Baltimore	393,796	79	156	20.7	25	...	18	4	4	4	4	.....	5	.....	.....	.....	6	38	3
District of Columbia	180,000	37	83	23.9	16	5	5	2	....	6	..	.....	5	....	.....	.....	1	23	4
Va.....Norfolk	27,200	5	15	29.0	3	.....	3	2	.....	2	.....	.....	.....	.....	.....	.....	.....	7	.....
Richmond	64,670	20	41	33.3	9	.....	2	.....	3	.....	.....	.....	1	...	1	.....	2	7	4
Lynchburg	16,500	1	4	12.6	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C .....Wilmington	17,600	6	8	23.8	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
S. C .....Charleston	57,000	14	25	22.8	3	.....	3	....	1	.....	.....	.....	2	.....	.....	.....	1	.....	.....
Ga.....Augusta	27,012	10	12	23.3	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atlanta	38,000	8	17	23.0	3	1	3	.....	2	.....	.....	.....	1	.....	.....	.....	1	2	.....
Savannah	33,248	11	25	39.5	3	.....	3	3	1	3	....	.....	1	.....	.....	.....	.....	.....	.....
Rome	5,000	.....	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla .....Jacksonville	10,000	2	6	31.3	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala .....Mobile	40,000	5	19	24.7	1	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	2	1
Selma	7,505	4	6	35.7	1	.....	....	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Miss.....Columbus	4,747	.....	1	11.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	1	2	14.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La .....New Orleans	216,359	.....	.....	21.6	16	.....	2	.....	....	12	.....	.....	7	.....	2	.....	.....	.....	1
Shreveport	8,033	6	9	58.6	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....
Morgan City	2,018	.....	1	25.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,250	2	3	21.6	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Tex .....San Antonio	20,597	3	9	22.8	1	.....	3	.....	1	.....	.....	.....	1	.....	.....	.....	.....	2	1
Ark .....Little Rock	22,000	5	11	26.1	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn ....Nashville	43,543	6	15	17.7	4	.....	1	...	1	...	.....	.....	.....	.....	.....	.....	1	3	.....
Memphis	34,000	6	24	36.8	....	.....	3	2	4	6	.....	.....	.....	.....	1	.....	.....	.....	1
Clarksville	7,250	.....	4	28.9	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,800	2	2	27.6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio ....Cincinnati	280,000	37	84	15.6	13	.....	10	1	...	1	1	.....	2	....	2	.....	1	19	3
Cleveland	175,000	.....	63	18.8	4	1	9	2	3	.....	3	....	2	.....	.....	.....	1	.....	2
Gallipolis	4,500	1	1	11.6	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Dayton	39,000	5	10	13.4	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	3	1
Portsmouth	11,320	3	5	23.0	.....	.....	1	.....	...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind .....Indianapolis	75,350	8	23	15.7	3	.....	3	...	2	3	.....	.....	.....	.....	.....	.....	3	12	.....
Jeffersonville	9,542	2	4	21.5	1	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richmond	13,000	1	6	24.7	.....	.....	1	...	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
Evansville	30,000	7	15	26.1	2	1	...	1	.....	4	.....	.....	.....	.....	.....	.....	1	.....	.....
Ill .....Chicago	503,208	108	181	18.8	16	4	26	21	6	3	8	.....	8	1	.....	.....	3	81	5
Peoria	34,450	4	11	16.5	2	.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	1
Aurora	12,059	1	2	8.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Jacksonville	15,000	.....	2	7.0	....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	1	4	23.8	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	...	2	.....
Moline	8,000	2	3	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Wis .....Milwaukee	11,617	19	42	18.8	5	.....	6	.....	.....	.....	1	.....	2	.....	2	.....	1	10	.....
Beloit	5,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn ....Saint Paul	41,800	11	15	18.8	.....	.....	2	.....	1	.....	.....	.....	2	1	.....	.....	.....	.....	.....
Mich ... East Saginaw	19,000	3	5	13.7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint	9,000	1	3	17.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansing	10,000	1	3	15.7	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Iowa ....Dubuque	28,000	.....	4	9.1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	12,125	.....	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 11, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Mo ..... Saint Louis	331,392	38	110	17.4	14	.....	17	1	3	11	.....	.....	1	.....	1	.....	1	44	7
Nebr .... Omaha	31,000	5	7	12.1	.....	1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Kans .... Lawrence	8,500	.....	1	6.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	4	9	18.8	.....	.....	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	3	.....
Cal ..... San Francisco	233,700	33	80	17.9	14	.....	7	1	2	.....	.....	.....	10	1	.....	.....	.....	15	.....
Sacramento	21,500	1	4	9.7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	1	3	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Vallejo	7,000	.....	2	14.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Totals	7,831,255	1,343	3,088	20.3	417	43	464	131	75	96	40	.....	167	5	26	11	41	738	102

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING SEPTEMBER 11, 1880.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass .... Boston	370,000	5,000	153	1	21.6	10.4
R. I ..... Providence	100,862	4,000	38	.....	19.6	.....
Del ..... Wilmington	38,000	6,000	20	3	22.2	26.1
Md ..... Baltimore	338,334	55,412	113	43	17.4	40.5
District of Columbia	120,000	60,000	46	37	19.9	32.1
Va ..... Norfolk	15,900	11,300	6	9	19.7	41.5
Richmond	37,970	26,700	13	28	14.4	55.0
S. C ..... Charleston	25,000	32,000	7	18	14.6	29.3
Ga ..... Savannah	18,229	15,019	12	13	34.2	45.0
Augusta	16,182	10,830	2	10	6.5	46.9
Atlanta	22,000	16,000	3	14	7.1	45.8
Brunswick	1,500	1,400	....	.....	.....	.....
Ala ..... Mobile	28,000	12,000	15	4	28.0	17.0
Selma	3,425	4,080	2	4	30.5	51.2
Fla ..... Jacksonville	6,000	4,000	3	3	26.1	39.1
Miss .... Columbus	2,500	2,247	....	2	.....	46.4
Natchez	3,500	3,500	.....	2	.....	29.8
La ..... New Orleans	159,128	57,231	57	33	18.6	30.1
Shreveport	3,916	4,117	2	7	26.6	89.3
Tenn .... Nashville	27,874	15,669	9	6	16.5	19.8
Clarksville	4,000	3,250	2	2	26.1	32.1
Memphis	17,293	16,707	16	8	48.3	25.0
Murfreesboro	2,000	1,800	1	1	26.1	29.0
Ohio ..... Portsmouth	10,320	1,000	3	2	15.2	104.3
Iowa .... Keokuk	11,165	960	1	.....	4.7	.....
Kans .... Lawrence	6,800	1,700	1	.....	7.7	.....
Totals	1,389,898	371,952	525	250	28.1	35.1

The following reports for the week ending September 11 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 11; under 5 years, 5; diarrhœa 3, diphtheria 1, enteric fever 1, malarial fever 1. Allegheny, Pa., 78,000; deaths, 25; under 5 years, 13; consumption 1, diarrhœa 5, diphtheria 3, enteric fever 2, lung disease 1. Bath, Me., 8,000; deaths, 3; enteric fever 1. Boulder, Colo., 3,020; death, 1. Brattleborough, Vt., 6,000; no deaths. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 6,400; deaths 3; consumption 2. Clinton, Mich., 1,205; deaths, 2; diarrhœa 1. Corinth, Miss., 2,264; death, 2; diarrhœa 2. Cumberland, Md., 10,667; death, 1; under 5 years, 1; scarlet fever 1. Dallas, Tex., 10,300; deaths, 4; under 5 years, 1; consumption 1, diarrhœa 1, malarial fever 1. Davenport, Iowa, 23,000; deaths, 8; under 5 years, 4; diphtheria 2, scarlet fever 1, lung disease 1, whooping-cough 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Fernandina, Fla., 3,000; death, 1. Franklin, Ind., 3,100; no deaths. Gunn City, Mo., 125; no deaths. Helena, Mont., 3,630; no deaths. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., no deaths. Huntingdon, Pa., 1,200; death, 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 5; under 5 years, 2; consumption 1, malarial fever 1, puerperal 1. Kenosha, Wis., 5,500; no deaths. La Salle, Ill., 10,000; death, 1. Lebanon, Pa., 9,000; no deaths. Louisiana, Mo., 5,000; deaths, 2; enteric fever 1. Madison, Ind., 9,009; deaths, 7; under 5 years, 3; consumption 3. Martinsburg, W. Va., 6,384; deaths, 5; under 5 years, 1; consumption 2, enteric fever 1. Meridian, Miss., 4,013; death, 1; diarrhœa 1. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; death, 1; under 5 years, 1. Monmouth, Ill., 6,000; death, 1; under 5 years, 1; Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 2; under 5 years, 2. Muscatine, Iowa, 8,412; no deaths. Muskegon, Mich., 11,300; deaths, 5; under 5 years, 3; diarrhœa 2, malarial fever 1, puerperal 1. Nebraska City, Neb., 5,200; deaths, 2; under 5 years, 2; diarrhœa 2. Niles, Mich., 4,200; no deaths. Okalona, Miss., 2,000; death, 1; under 5 years, 1; lung disease 1. Painesville, Ohio, 5,500; no deaths. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 2; under 5 years, 2; diarrhœa 2. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; no deaths. Port Royal, S. C., 750; no deaths. Rensselaer, Ind., 901; no deaths. Rock Island, Ill., 12,000; deaths, 4; under 5 years, 1; consumption 1, diarrhœa 1, enteric fever 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 4; under 5 years, 2. Summit, Miss., 1,808; deaths, 2; under 5 years, 1; diarrhœa 2. Tampa, Fla., 740. Titusville, Pa., 9,000; deaths, 3; under 5 years, 1; croup 1, accident 2. Verona, Miss., 1,000; no deaths. Winchester, Va., 5,000; no deaths. Winona, Minn., 10,000; deaths, 3; under 5 years, 2; consumption 1, lung disease 1. Youngstown, Ohio, 15,089; deaths, 7; under 5 years, 2. Total population, 373,593; deaths under 5 years, 54; total deaths, 112; annual rate per 1,000, 12.6.

INSPECTORS' REPORTS.

NEW ORLEANS, LA., September 9.—Dr. S. H. Collins reports that the fever prevailing about Pointe à la Hache is not yellow fever, but malarial, and yields readily to quinine in most cases.

Dengue is on the decline in New Orleans and along the lower coast. Some cases of yellow fever have occurred.

BROWNSVILLE, TEX.—This city and the neighboring Mexican city of Matamoras were in the path of a chubasco or cyclone, which began with a wind from the north early on the morning of August 12, which steadily increased in force till midnight, when it suddenly ceased. After two hours of calm, the wind came from the S.E. and blew until 6 p. m. of the 13th with great violence. The various descriptions of the storm indicate that it has caused great damage and some loss of life. The sanitary condition of the cities and towns in its track is likely to be much injured; that of Matamoras is represented as deplorable by the United States consul, Warren P. Sutton.

BURLINGTON, VT.—Under date of September 10, Dr. George M. Ockford states that the only epidemic or contagious disease prevailing is whooping-cough, but this has caused only a few deaths. The sanitary condition of the city has been improved by the removal of a soap factory from a central location to the suburbs, but drainage is still defective.

MINSTER, OHIO, September 18.—Dr. E. F. Wells writes that no contagious diseases prevail in that vicinity, but the usual malarial fevers are mostly of a remittent form, and not readily amenable to treatment. The sanitary condition of the town is good.

NOTICE.—After August 28, the reports from hospitals in the United States will be published every four weeks in a table giving the totals for that period. Only those hospitals sending reports for the four weeks will be represented in the table.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Sept. 4	1	10.4													64
Pr. Edward Island	Charlottetown	12,000	Sept. 4	1	4.3													63.8
Do	do	12,000	Sept. 11	2	8.6													61.8
Canada	Kingston	16,000	Sept. 11	4	13.0													
Do	Montreal	135,000	Sept. 11	69	26.7								2				2	61.2
Bermuda	Hamilton	14,867	Sept. 7	4	14.0													69.1
Do	do	14,867	Sept. 14	4	14.0													69.1
Cuba	Havana	195,437	Sept. 4	160	42.7				30		5		5					84
West Indies	Turks and Caicos Islds	3,500	Aug. 21	1	14.9													85
Do	do	3,500	Aug. 28															86
Do	do	3,500	Sept. 4	1	14.9													85
Mexico	Matamoros	16,000	Sept. 4	4	13.0						2							
Brazil	Rio de Janeiro	330,000	Aug. 14	158	25.0				1		1		1				5	
Do	do	330,000	Aug. 21	167	26.4				1				1				1	
Teneriffe	Santa Cruz	16,610	Aug. 14	7	22.0							2						
Ireland	Queenstown	10,000	Sept. 4	6	31.3													
Do	Belfast	230,000	Sept. 4	107	30.6					4		17	5			5	3	60.9
Do	Dublin	314,666	Sept. 4	214	34.2						1		1				27	
Scotland	Dundee	155,100	Aug. 28	56	18.8											7		60.8
Do	Glasgow	589,598	Aug. 28	209	18.5								17				16	60.0
Do	Leith	58,479	Sept. 4	20	17.8												7	60.8
England	London	3,254,260	Aug. 28	1,488	21.3						3		13				105	62.7
Do	Newcastle	148,000	Aug. 28	75	26.2												2	61
Do	Bradford		Aug. 28	89	23.5												10	
Do	Tunstall	180,093	Aug. 28	102	29.3								1				3	
Do	Liverpool	544,056	Sept. 4	359	34.4							5		18	3	15	30	66.1
Do	Sheffield	304,938	Sept. 4	160	27.4								1					64.5
Wales	Cardiff	82,304	Sept. 4	25	15.7								1		1		6	60
France	Paris	1,988,806	Aug. 26	1,048	27.4						35		42				81	
Do	Rouen	104,902	Sept. 4	66	32.8													
Switzerland	Zurich	22,103	Aug. 28	11	26.0												1	
Do	Geneva	52,077	Aug. 7	11	11.0													
Do	do	52,077	Aug. 14	12	12.0												3	
Do	do	52,077	Aug. 21	22	22.0													
Do	do	52,077	Aug. 28	12	12.0													
Holland	Amsterdam	316,952	Aug. 28	190	31.3								4		1		7	
Do	Rotterdam	150,378	Aug. 28	60	20.8											3		
Germany	Berlin	1,096,644	Aug. 21	621	29.4							35	15			132	56	
Do	Breslau	276,000	Aug. 21	182	34.3								3				40	
Do	Hamburg	400,000	Aug. 14	232	30.3												8	
Do	Frankfort	129,000	Aug. 21	50	20.4										1		1	
Do	do	129,000	Aug. 28	54	22.0										1			
Do	Nuremberg	105,000	Aug. 14	46	22.9													
Do	do	105,000	Aug. 21	57	28.3												3	
Do	Mannheim	50,500	Sept. 4	22	22.7													
Do	Bremen	109,000	Aug. 21	54	25.8									1	1			
Do	Brunswick	74,000	Aug. 28	45	31.7										1		2	
Do	Barmen	95,000	Aug. 28	47	25.7													
Do	Cologne		Aug. 28	109	40.0												14	
Saxony	Leipsic	150,836	Aug. 28	94	32.4												5	
Do	Chemnitz	92,137	Aug. 21	56	31.8								1				2	66
Belgium	Brussels	406,638	Aug. 28	202	25.5								2				1	
Denmark	Copenhagen	235,254	Aug. 24	144	31.8							20	3			18		
Italy	Genoa	184,000	Aug. 28	99	28.0													
Do	do	184,000	Sept. 4	105	29.8													
Do	Rome	305,161	July 3	173	29.6						6		1				25	
Do	do	305,161	July 10	172	29.4						6		3				35	
Austria	Vienna	746,243	Aug. 21	302	18.2						5		5				2	
Do	Trieste	128,233	Aug. 14	121	49.2						2				1			
Hungary	Buda-Pesth	344,604	Aug. 21	254	38.4						6		5					
Russia	Warsaw	357,169	Aug. 21	266	38.9						2							
Sweden	Stockholm	169,429	Aug. 14	99	31.6												12	
Do	do	169,429	Aug. 21	65	20.7												15	
Norway	Christiania	116,801	Aug. 21	68	30.3					1		1					2	
Portugal	Lisbon	225,152	July 17	118	27.3								4					
Do	do	225,152	July 24	129	29.9								6					
Do	do	225,152	July 31	142	32.9						1		14					
Do	do	225,152	Aug. 7	134	31.0								9					
Do	do	225,152	Aug. 14	139	32.7								12					
Do	do	225,152	Aug. 21	138	31.9						1		8					
Do	Oporto	108,346	Aug. 7	67	32.2													
Do	do	108,346	Aug. 14	69	33.2						1		1					
Do	do	108,346	Aug. 21	86	41.4													
Spain	Cadiz	65,028	Aug. 28	44	35.3													
Barbary	Tripoli	20,000	Aug. 21	11	28.7													90.5
Do	do	20,000	Aug. 28	8	20.9													90.2
Cape Colony	Cape Town	35,000	Aug. 16	27	40.2													62
Egypt	Alexandria	220,000	Aug. 28	184	43.6													
Seychelles Islands	Mahe	12,000	July 17	5	21.7													
Do	do	12,000	July 24	2	8.7													
Do	do	12,000	July 31	6	26.1													
Do	do	12,000	Aug. 7	4	17.4													
Do	do	12,000	Aug. 14	6	27.1													
India	Calcutta	429,535	July 31	183	22.2		3				1		10				2	82.1
China	Shanghai	2,000	July 27	1	26.1													79.3
Do	do	2,000	Aug. 3	2	52.2													78.5
Do	do	2,000	Aug. 10															79.6
Japan	Kobe	18,282	July 31	7	20.0													
Do	do	18,282	Aug. 7	19	54.2													
Do	do	18,282	Aug. 14	11	31.4													

National Board of Health

BULLETIN.

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P. FOSTER, M.D. 1ST. N.Y. 26TH ST. E.

SANITARY LEGISLATION IN COLORADO.

The following ordinance, providing for the collection of vital statistics has been passed by the authorities of the town of Boulder:

AN ORDINANCE in relation to the record of births and deaths and the issue of permits for burial of the dead.

Be it ordained by the board of trustees of the town of Boulder:

SECTION 1. Each physician, surgeon, and midwife shall keep a registry of every birth in the town at which he or she shall have attended professionally. Said registry shall contain a statement, as near as may be, of the time of birth and the exact locality thereof the name of the father, the maiden name of the mother, the place of residence of each parent, the occupation of the father, the sex and color of the child, and the fact of its being born alive or dead. In case two or more of such persons shall have attended professionally at any such birth, the one oldest in attendance shall make the registry; but in the absence of any such person, the father or mother of the child shall make such registry and be alike responsible therefor. The registry of any such birth shall be made upon a separate paper and signed by the maker thereof in his or her professional capacity, or otherwise as the case may be. Within seven days from the time of the occurrence of any such birth, the maker of the registry thereof shall deliver it to the recorder and clerk of the town, to be filed by said officer without delay, among the records of the town.

SEC. 2 A book, to be known as the "Record of Births," shall be kept in the office of said clerk, which shall contain suitable columns for the entry of all the facts required in said registry. Said officer shall without delay make a full entry of all of said facts in said book according to its columns and in the alphabetical order of the surnames of the parents.

SEC. 3. Within thirty-six hours from the time of the death of any person within the corporate limits of the town, and before the removal of the same for interment, the undertaker or other person who shall have taken the interment in charge shall obtain a permit therefor from the recorder and clerk of the town by application thereto.

SEC. 4. At the time of the application the person making the same shall present to said officer a certificate that shall contain a statement, as near as may be, of the following facts in relation to any such deceased person, to wit: the date of the death, name, age, occupation, and place of birth as to town, county, and State, the exact locality of the death in the town, the cause of the death, the duration of the disease or other cause of death, the sex, color, and fact of being married or single.

SEC. 5. Said certificate shall be obtained from the physician or surgeon who shall have professionally attended such deceased person up to the time of death. In case two or more of such persons shall have thus attended such deceased person, the one oldest in attendance shall furnish such certificate; but in case no physician or surgeon shall have been in attendance upon such deceased person as aforesaid, then from the health officer of the town, who shall make no charge for such service.

SEC. 6. On request of any proper party intending to make such application, it shall be the duty of any such physician, surgeon, or health officer to furnish such certificate. In case of an inquest, the coroner or other person making the same shall furnish the certificate. The certificate of the health officer shall be sufficient on the failure of any other of said parties to furnish the same. Every such certificate shall have the name of the maker thereof affixed thereto in his professional or official capacity, as the case may be, and the place of his residence.

SEC. 7. Each of said permits shall be numbered in the order of its issue and bear the date of its issue, shall set forth the name of the applicant, the name of the deceased, and time and place of death, and shall be signed by said recorder and clerk, and have the seal of the town affixed thereto. The sum of fifty cents shall be paid by such applicant to said officer for each permit, and the same paid into the town treasury by said officer.

SEC. 8. Said officer shall keep a register of burial permits, in which shall be entered without delay a brief record of such permits in substance.

SEC. 9. Said undertaker or other person shall deliver said permit to the sexton or other person in charge of the cemetery or other place of burial before such interment takes place.

SEC. 10. On Monday of each week every undertaker or other person who shall have taken in charge the interment of any such deceased person shall make a report in writing to said recorder and clerk. Said report shall contain a statement of the number of interments that shall have been made under his charge during the week last preceding that of the report, and all other interments made by him that shall not have been reported before, the name of each of such deceased persons, the date of burial, the name of the sexton or other person to whom any such deceased person shall have been delivered, the exact locality of burial by specific designations through established names of the cemetery and lot, or part of lot, or other divisions therein, and any other place not in a cemetery, and by such other further physical descriptions as may be sufficient to make the grave of one deceased person readily distinguishable from all others.

SEC. 11. At the same time and in the same manner, the sexton or other person acting as such shall make a report of the facts above required from the undertaker with the variation that said last report shall show the number of the permit and from what undertaker or other person any such deceased parties shall have been received. Every such report shall be signed by the maker thereof. In case there shall be no sexton or other person acting as such at the burial of any deceased person, then the undertaker or other person acting as such shall make the report required of the sexton, and such last report shall stand in lieu of both reports required in other cases.

SEC. 12. Each undertaker, sexton, or other person required to make the above reports shall keep a blank book with suitable columns for the entry of the facts necessary to be reported by him, and shall make such entries without delay.

SEC. 13. The provisions of this ordinance shall be deemed to apply to the interment of persons that, after death, shall have been brought within the corporate limits of the town and kept therein for the purpose of being prepared for interment.

SEC. 14. The recorder and clerk shall keep a book in his office, to be known as the "Record of Mortality," in which shall be entered in suitable columns by said officer the substance of said certificates and reports; and the said matters in relation to such deceased persons shall be arranged in said book in the alphabetical order of the surnames thereof. Such entries shall be made without delay.

SEC. 15. In case any report required by this ordinance shall not be made to the recorder and clerk, then it shall be the duty of said officer to make a record of any such birth or death in the proper book of all of the facts required by this ordinance, from his own knowledge or the best information obtainable. It shall be the duty of the town marshal and health officer to assist said clerk in obtaining such information, and to report to the town attorney or the board of trustees every case coming to his knowledge, by information or otherwise, of the infringement of any of the provisions of this ordinance.

SEC. 16. The board of trustees shall cause to be printed, at the expense of the town, a sufficient number of all blank papers and books requisite for the purposes of this ordinance, with appropriate columns according to the use intended for any such paper or book. Said papers and books shall be kept in the office of said recorder and clerk and delivered in sufficient number by said officer to any proper person requesting the same for use.

SEC. 17. Whoever shall violate any of the provisions of this ordinance, or fail to comply therewith, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, be fined not less than five nor more than fifty dollars.

Passed by the board of trustees and approved this 6th day of September, A. D. 1880.

[SEAL.] JOHN A. ELLET, *Mayor.*

Attest.

E. J. MORATH, *Recorder and Clerk.*

SANITARY LEGISLATION IN GEORGIA.

AN ACT to authorize the city council of Augusta to create a board of health for said city.

SECTION 1. *Be it enacted by the general assembly of the State of Georgia and it is hereby enacted by the authority of the same,* That the city council of Augusta be empowered, after the passage of this act, to create a board of health for said city, the members of said board to be appointed by council, and to be composed of such good and discreet citizens and physicians (not to exceed twelve in number) as may best subserve the purposes for which said board is created, said

board to serve without pay or emolument, and to be composed of one citizen from each ward, two physicians from city at large, one chemist, mayor, and health committee, *ex officio*, who shall hold office for such length of time as the city council of Augusta may prescribe.

SEC. 2. That said board shall have full power to institute all sanitary measures necessary to the preservation of the public health, and for the prevention of the generation and introduction of infectious and contagious diseases, yellow fever, small-pox, and cholera. They shall likewise exercise absolute power over the subject of quarantine (personal or otherwise), penalties for the violation of which shall be so fixed by the code of Georgia, or by the municipal regulations, as to be enforced by the recorder's or other court of said city.

SEC. 3. That said board of health shall have only an advisory relation to the city council of Augusta as to any extended system of drainage or other like improvements, the power to recommend for this and other similar purposes being their sole prerogative.

SEC. 4. That the abatement of nuisances, the policing of premises and general inspections, and enforcement or execution of quarantine regulations, shall be done through the municipal authorities, the board of health simply determining the fact of a nuisance existing, the time when, extent of, and the manner in which said acts shall be done; the appointing power of all officers and employés resting with the city council, who shall affix their pay.

SEC. 5. That the necessary expenses of said board of health shall form a legitimate item in the administration of the city government, to be met, as in the case of other expenditures, by such appropriations of money as the city council, in the exercise of a sound economy, may deem proper.

SEC. 6. That the small-pox hospital (or other temporary hospital for contagious diseases) shall alone be under the management of said board of health.

SEC. 7. That the said board of health shall make, annually, to the city council of Augusta, at the last monthly session of said body, a full report of its acts, particularizing its expenditures, and making such recommendations touching the public health and welfare as in their judgment may seem fit and proper; and shall also make such other reports on the same subjects, from time to time, as the said city council may require.

SEC. 8. That the said board of health shall hold at least one session in each month, and shall have power to declare a vacancy in the board when any member, except the city council members of said board, shall fail to attend three consecutive monthly meetings, and to report such vacancy to the city council of Augusta, to be filled as said city council may prescribe; and said board shall be further empowered to pass such by-laws and regulations as may be necessary to secure the efficiency of the organization.

SEC. 9. That a majority of the members of said board of health shall constitute a quorum for the transaction of business (except in times of epidemic visitation, when two members shall have power to act). A record of their proceedings, open to the city council, shall be carefully kept and filed among the archives of the city government.

SEC. 10. That said board of health shall have the power to declare what are infected ports, on information satisfactory to them, public notice of which shall be sufficient to give legal effect to all of their subsequent acts.

SEC. 11. That said board is further authorized and empowered to establish quarantine stations at such convenient distances as it may think best for said city, not exceeding forty (40) miles, and to forbid all persons from coming from infected or contagious ports nearer to said city than said established stations. Said board is also empowered to establish such regulations as to the transportation of all freights of every kind or character whatsoever, coming into or passing through said city, as it may think best calculated to carry out the objects of its creation; and also like power to require the ventillation, disinfecting, cleaning, and other precautionary measures in reference to all cars, engines, boats, and vehicles coming into or passing through said city. Publication of said rules shall be considered sufficient notice, and any person or persons offending against such regulations shall be guilty of a misdemeanor, and be punished as prescribed in section 4310 of the code of Georgia; and, in addition to said penalty, any corporation offending against such regulations shall be subject to a fine not exceeding five thousand dollars ($5,000), to be recovered in any court of competent jurisdiction.

SEC. 12. That all laws and parts of laws conflicting with this act be, and are hereby, repealed.

Approved February 26, 1877.

AN ACT to amend an act entitled "An act to authorize the city council of Augusta to create a board of health for said city."

SECTION 1. *Be it enacted by the general assembly of the State of Georgia and it is hereby enacted by the authority of the same*, That from and after the passage of this act the words "a majority of the," in the ninth section of the above-recited act, be stricken out, and the word "five" inserted in lieu thereof.

SEC. 2. That all laws and parts of laws conflicting with this act be, and the same are hereby, repealed.

Approved August 23, 1879.

[Extract from the city code of 1880, page 43].

CHAPTER XXXVI.

Board of health.

1. The following-named persons, and their successors, with the mayor and health committee of council for the time being, who are *ex-officio* members of said board, shall constitute a board of health for this city, viz: From the first ward, Samuel Levy, esq., for the space of four years, and until his successor is appointed; from the second ward, William F. Eve, esq., for the term of four years, and until his successor is appointed; from the third ward, Robert A. Fleming, esq., for the term of three years, and until his successor is appointed; from the fourth ward, William Mulherin, esq., for the term of four years, and until his successor is appointed; two physicians from the city at large, and a chemist, to serve for four years each, and until their successors are appointed; each of whom shall be nominated by the mayor of the city, to be approved of by council, and all of whom shall serve without pay or emolument; the term of office to be from the date of appointment.

2. The said board of health shall have full power to institute all sanitary measures necessary for the preservation of the public health of said city, and for the prevention of the generation and introduction of infectious and contagious diseases, yellow fever, small-pox, and cholera, and may exercise absolute power over the subject of quarantine, personal or otherwise, and, in general, shall be clothed with all the power, authority, and jurisdiction conferred by the creating act, and shall discharge the duties therein imposed, subject, however, to the restrictions and limitations therein prescribed, and especially subject to the authority and control of the city council of Augusta.

3. The recorder's court shall have jurisdiction to try all parties charged with violations of the ordinances and sanitary regulations of said board of health, and such parties, upon conviction, shall be punished by a fine not exceeding five hundred dollars, imprisonment in the county jail, or labor on the public works, either not to exceed three months; and for any violation of the quarantine regulations of said board, such penalty or penalties shall be inflicted as are provided in section 4310 of the code of Georgia, as provided by the act of the legislature of this State authorizing the creation of said board.

ABSTRACTS FROM CONSULAR REPORTS.

AMOY, CHINA.—United States Consul W. E. Goldsborough sends reports to July 31. A few cases of cholera had occurred during the month among the native population, but the disease was not epidemic. No deaths among the foreign residents. Sanitary condition of the native city population not good, and drainage very defective. Population about 300,000.

ANTIGUA, WEST INDIES.—United States Consul C. E. Jackson forwards report of the registrar-general for the year 1879. There were 1,298 births and 1,165 deaths registered, the death-rate being 33.9 per 1,000. The infant mortality was 36.6 per cent. of the total. Of 158 deaths classed under "fevers," only 3 were from yellow fever. The proportion of illegitimate births for the whole island was 72 per cent. of the total, and in one parish nearly 81 per cent.; the high rate of infant mortality is partly due to this state of morals. There were 188 marriages recorded in the island during the year. The general health of the people is good, no yellow fever or epidemic disease prevailing.

BRUNSWICK, GERMANY.—United States Consul W. C. Fox reports that two cases of cholera, occurring early in September, caused some alarm, but investigation proved that they were not Asiatic cholera, and that there was no danger of the disease becoming epidemic.

CALCUTTA.—The report of the health officer, K. McLeod, M. D., for the second quarter of 1880 gives the number of deaths from several causes as follows: Fevers, 619; cholera, 129; diarrhœa and dysentery, 225; small-pox, 26; other causes, 1,154; total, 2,153. The births in the same period were 1,716.

CONSTANTINOPLE.—United States Consul H. G. Heap forwards reports of Dr. H. B. Matteosian from July 12 to August 29. Typhus fever is decreasing in all the provinces noted, but dysentery is more prevalent than usual in that of Van. About Gaza and Salonica and in Thessaly some disease was noted among cattle, and horses are reported diseased at Medina.

FOOCHOW, CHINA.—United States Consul J. C. Wingate sends reports for the month of July, stating that the sanitary condition of the foreign settlement is good, but that of the native city very bad, owing to defective drainage and accumulation of filth. The population of the city is estimated at 600,000, and of the suburbs at 500,000. No vital statistics can be obtained.

HAVANA, CUBA.—For the week ending September 10, 20 deaths from yellow fever are reported. During the last month the disease

has shown a tendency to increase and to spread to the shipping at the wharves, but most of the cases are mild. The vessels supposed to have had the fever on board, while discharging at infected wharves, were the Spanish bark *Aranco*, for Charleston, S. C., September 7, and the American bark *Shetland*, for Boston, September 11. During the week ending September 17, there were 19 deaths from yellow fever, of which 10 were in the city and 9 in the military hospitals. The type of the disease continues mild, and the proportion of deaths to cases is small. The following vessels, which have sailed or are about to sail for ports in the United States, are believed to have had yellow fever on board while at Havana: The Spanish barkentine *Clementina*, for Brunswick, Ga., September 16; American bark *Isaac Jackson*, for New York, *via* Caibanen, September 17; Spanish barks *Catalina*, *India*, and *Altagracia*, which will sail for Savannah September 18.

MELBOURNE, AUSTRALIA.—United States Consul O. M. Spencer forwards the official report for the month of June, from which it appears there were 823 births and 381 deaths during the month, in a population of 265,000, including the city and suburbs. The birth-rate was therefore 37.3 and the death-rate 17.3 per 1,000 per annum. Of the 381 deaths, 52 were from zymotic diseases, 43 from consumption, 93 from other lung diseases, 25 from diseases of the digestive system, 49 from those of the nervous system, 21 from heart diseases, and 16 from violence or accidents. There were 139 deaths under 5 years, being 36.5 per cent. of the total; of these deaths 93 were under 1 year of age. The deaths in child birth were 3, or one to every 274 births registered.

NASSAU, WEST INDIES.—United States Vice-Consul S. P. Saunders makes the following observations upon yellow fever in the island of New Providence, under date of September 13:

I have to report that during the week ending August 14 there were 16 cases of yellow fever in this city, and 4 deaths; the week ending August 21, 33 cases and 3 deaths; the week ending August 28, 24 cases and 1 death; the week ending September 4, 5 cases and 2 deaths; and the week ending September 11, 1 case and no death. It will be noticed that although there have been 79 cases in the five weeks mentioned, only 10 of them have ended fatally.

At this period of the year the island has, heretofore, been regularly visited by a common bilious fever, but it is a noticeable fact that during the present year there has been almost an entire absence of this fever; it has either run into the more malignant type, or else several cases which have been reported as yellow fever have been nothing more than severe cases of bilious fever.

Judging by the very small proportion of deaths to the number of cases reported during the last five weeks (the regular bilious fever period), it is but natural to suppose that bilious fever has sometimes been mistaken for yellow fever, and that, therefore, the disease has been somewhat overrated.

Up to the 6th instant, the board of health, which is composed principally of the physicians of the island, had styled the disease, in their official returns to me, "Malignant and Hemorrhagic Fever," but at a meeting held on the 6th, it was decided to call the disease yellow fever in future. It appears that in the case of native children attacked, it has not always followed the usual and well-known course of yellow fever, and it was consequently thought by some physicians that there were two fevers of malignant type existing in the island at the same time, namely, yellow fever in the case of unacclimated adults, and a malarial hemorrhagic fever in the case of native children; and hence it was that they were both classed under one head as "Malignant and Hemorrhagic Fever."

I am happy to state that the disease appears to be rapidly dying out; last week only one case was reported, and up to the date of this dispatch there has been only one case for the current week.

NINGPO, CHINA.—The reports for three weeks ending July 31, forwarded by United States Consul E. C. Lord, represent that the health of the city is good, though the unusually cool and wet weather prevailing during the month has increased diarrhœal diseases and fevers to some extent. The range of mean temperature was from 82° to 85°.

NEW ZEALAND.—Reports for the month of June give 498 births and 147 deaths in a population of 130,225. In the four principal boroughs, having a population of 75,719, the deaths were 103, of which 34 were under 5 years, 15 were from zymotic diseases, 12 from consumption, 10 from other lung diseases, 13 from diseases of the brain and nervous system, 2 from diseases of the heart, and 2 from those of the digestive system.

SINGAPORE.—United States Consul A. G. Studer, under date of August 2, reports his district free from infectious or epidemic diseases.

SINGAPORE.—United States Consul A. G. Studer reports his district free from epidemic or contagious diseases up to August 9.

SYDNEY, AUSTRALIA.—During the month of June, 307 births and 200 deaths were recorded. Among the causes of death were, diseases of the brain and nervous system, 39; of the heart, 11; of the lungs, 21; consumption, 19; violent deaths, 7. In the suburbs, 402 births and 151 deaths were registered. The mortality under 5 years was 31 per cent. in the city, and in the suburbs 49 per cent. of the total. The temperature ranged from 40° to 68°; westerly winds prevailed, and rain fell on ten days, the total rain-fall being 5.2 inches.

The report for the quarter ending June 30 gives a total of 2,184 births and 1,000 deaths, in a population of 136,483.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

AUGUSTA, GA.—Dr. L. T. Blome, secretary of the board of health of Augusta, under date of September 13, states that there is a fever prevailing which is called "break-bone," or *dengue*, by some physicians, but is generally regarded as simple malarial fever with spinal irritation. The same disease is said to prevail in several other cities of the South Atlantic and Gulf States. The city authorities are disposed to co-operate with the board of health in improving the drainage and general sanitary condition of the city. Dr. Blome forwards a copy of the legislative acts, a portion of which will be found in another column.

BOULDER, COLO.—Dr. Charles Ambrook, under date of September 20, reports the passage of an ordinance relating to vital statistics, which is given in another column. Some typhoid fever has been noted of late, and Dr. Ambrook believes that this disease may be caused by a poison generated within the body of the patient under the best circumstances of drainage, food, and water supply, healthy locality, and absence of contagion. The disease thus originating may be intensified, and the poison may be communicated by infection or contagion to other persons, defective sanitary and hygienic conditions, of course, favoring such transmission.

EAST SAGINAW, MICH., September 26.—Dr. B. L. Cleveland, health officer, reports that diphtheria has prevailed for several months. Since May 1 there have been 71 cases and 13 deaths recorded. Burial permits are required, and the printed forms furnished to physicians specify the name, date of death, place of birth, age, occupation, and cause of death of each decedent.

HOUSTON, TEX.—Under date of September 20, Dr. W. L. Coleman states that for two months past there have been frequent rains, and malarial fevers have been unusually prevalent. In August they were of intermittent type, but during September the remittent and continued form is common. During three days of the first week in September a "Norther" prevailed, reducing the temperature to 54°. This was followed by a rapid increase in the number of cases of fever, and it is estimated that there are over 3,000 cases in Houston at present. The disease usually lasts from three to seven days, but after convalescence patients frequently suffer for some time with supra-orbital neuralgia, and headache, with pains in the back and stomach. In children, convulsions often occur. The tendency to hemorrhage from the mucous surfaces is marked. In several cases of malarial hœmaturia, full doses of ergot, quinine, and opium have been used with success. The general sanitary condition of the city is not good, and vigilance will be required to prevent the introduction of disease, such as yellow fever, from without.

KEY WEST, FLA.—A dispatch from the health officer, R. J. Perry, dated September 21, states that no yellow fever is known to exist at that port or in its vicinity. Some 30 or 40 cases of a mild form of *dengue* fever have occurred during the past two months among the native children.

NEW YORK QUARANTINE.—Dr. W. M. Smith, under date of September 20, states that the reports of yellow fever on board the bark *Erinagh* and other vessels are entirely groundless. The cases so reported were typho-malarial fevers, aggravated frequently by the foul and ill-ventilated condition of the forecastle of the vessels. These fevers have been found on vessels from Port de Paix and Pointe à Pitre, and are of malarial origin only

SAINT MARY'S, GA., September 17.—Dr. A. F. Barnard reports that the town continues healthy. A few cases of measles have occurred; but the only death recorded for the three months ending September 13 was one from intussusception.

TARRYTOWN, N. Y.—Under date of September 27, Dr. N. H. Freeland, health officer, reports an epidemic of dysentery existing since the middle of August. The disease is confined to a population of laborers who have been employed in deepening the bed of a brook, for better drainage of the town. These people are ill-fed, and their water supply is from wells subject to pollution from surface drainage. Twenty cases and 4 deaths are reported.

MISSISSIPPI RIVER INSPECTION.

Under date of September 24, Dr. R. W. Mitchell, member of the National Board of Health, forwards the following application from Dr. W. T. Balfour, health officer at Vicksburg, Miss., which application has been granted:

At a meeting of the mayor and council of the city of Vicksburg, held at the city hall on September 20, I am instructed by a resolution of said mayor and council to request the continuance of the National Board of Health inspecting station below this city till October 15, 1880, as by such continuance this community would feel much more protected.

Hoping you will grant the above request and notify me of your action,

I remain, respectfully,

W. T. BALFOUR, M. D.,
Health Officer.

QUARANTINE NOTICE.

SAPELO QUARANTINE STATION.—Under date of September 15, Dr. W. H. Elliott forwards the following notice to pilots, issued by the authorities of Brunswick, Ga.:

QUARANTINE NOTICE.

Pilots will, in all cases, before boarding, make inquiry as to the sanitary condition of the vessels destined for this port. Vessels with cases of sickness on board, or on which serious cases have occurred, either during the voyage or in the port of departure, will be ordered to proceed at once to the national quarantine station at Sapelo.

All vessels bearing the certificate of the national quarantine officer, bound for this port, will be brought to anchor within the quarantine limits of this port until inspected by the health officer.

All other vessels destined for this port will be subject to the regulations previously issued.

JAS. S. BLAIN, M. D.,
Health Officer, C. B.

Brunswick, Ga., August 23, 1880.

SANITARY SURVEY OF PEARLINGTON, MISS.

Dr. J. A. Mead forwards the following report of a sanitary survey of the above place, with schedule of forms filled as required by the National Board of Health:

The printed form is filled, as far as it can apply to a small country place without any organized municipal form of government and a total absence of records.

The inspection was a house to house visit, and the endeavor was made to be thorough. The water supply was found to be in most cases anything but desirable, being derived from under-ground cisterns made in the most primitive manner, simply a hole in the ground lined with planks. A few cisterns are above ground. The occupants of the dwellings that were found in the worst sanitary condition were near the mills, and obtained their water from large cisterns above ground connected with the mills. The greater portion of the population reside in cabins well ventilated for the summer months, and too much ventilation for good health in winter. No provision is made for the removal of excreta and garbage; but, as nearly every dwelling has a small garden attached, a large portion is used to fertilize the earth. The privies are removed from fifty to one hundred and fifty feet from the dwellings, and are without vaults in nearly every case.

Among the tenant class the sanitary condition is bad; they are ignorant negroes, who pay but little attention to cleanliness of person or dwelling. They say: "We cannot clean up our places and work as we do from daylight to dark in the mills."

There is no regular system of drainage, but owing to the surface formation water does not remain in yards any length of time.

AURORA, ILL., September 24.—Dr. M. M. Robbins, president of the board of heatth, states that typho-malarial fever prevails in the city, most of the more severe cases being confined to one section.

NOTICE.—After August 28, the reports from hospitals in the United States will be published every four weeks in a table giving the totals for that period. Only those hospitals sending reports for the four weeks will be represented in the table.

CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

Name.	Residence.
Allen, T. J., M. D	Shreveport, Louisiana.
Ambrook, Charles, M. D	Boulder, Colorado.
Baird, James B., M. D	Atlanta, Georgia.
Balch, G. B., M. D	Yonkers, New York.
Barnard, A. F., M. D	Saint Mary's, Georgia.
Bates, C. B., M. D	Santa Barbara, California.
Betton, George W., M. D	Tallahassee, Florida.
Bibb, R. H. L., M. D	Austin, Texas.
Blain, J. S., M. D	Brunswick, Georgia.
Brewer, Charles, M. D	Vineland, New Jersey.
Brumbaugh, A. B., M. D	Huntingdon, Pennsylvania.
Bullard, G. B., M. D	Saint Johnsbury, Vermont.
Burroughs, R. B., M. D	Jacksonville, Florida.
Carter, J. L., M. D	Dallas, Texas.
Cleemann, R. A., M. D	Philadelphia, Pennsylvania
Cochran, Jerome, M. D	Mobile, Alabama.
Compton, J. W., M. D	Evansville, Indiana.
Couch, John F., M. D	Somerville, Massachusetts.
Cummings, J. B., M. D	Forrest City, Arkansas.
Dale, E. T., M. D	Texarkana, Arkansas.
Dancy, F. W., M. D	Holly Springs, Mississippi.
Delaney, E., M. D	Fond-du-Lac, Wisconsin.
Dement, J. J., M. D	Huntsville, Alabama.
Dennison, Charles, M. D	Denver, Colorado.
Dibrell, J. A., M. D	Little Rock, Arkansas.
Dorsey, R. W., M. D	Pilot Point, Texas.
Ellis, Charles M., M. D	Elkton, Maryland.
Evans, S. T., M. D	Union City, Tennessee.
Fisher, George J., M. D	Sing Sing, New York.
Fite, C. C., M. D	Shelbyville, Tennessee.
Foote, G. M., M. D	Galesburg, Illinois.
Ford, D. W., M. D	McComb City, Mississippi.
Freeland, N. H., M. D	Tarrytown, New York.
French, George F., M. D	Minneapolis, Minn.
Fulgham, F. L., M. D	Crystal Springs, Mississippi.
Gerrish, F. H., M. D	Portland, Maine.
Gilliland, H. D., M. D	Gunn City, Missouri.
Grissom, E., M. D	Raleigh, North Carolina.
Harris, T. W., M. D	Chapel Hill, North Carolina.
Hawkins, A. W., M. D	Huntingdon, Tennessee.
Hays, J. M., M. D	Philadelphia, Pennsylvania.
Hipolite, W. W., M. D	Devall's Bluff, Arkansas.
Holden, Edgar, M. D	Newark, New Jersey.
Holton, H. D., M. D	Brattleborough, Vermont.
Horner, Frederick, M. D	Salem, Virginia.
Hope, W. T., M. D	Chattanooga, Tennessee.
Hough, F. B., M. D	Lowville, New York.
Huger, A. H., M. D	New Orleans, Louisiana.
Hyndman, J. G., M. D	Cincinnati, Ohio.
James, B. W., M. D	Philadelphia, Pennsylvania.
Jenkins, J. Foster, M. D	Yonkers, New York.
Jepson, S. L., M. D	Wheeling, West Virginia.
Jones, N. E., M. D	Circleville, Ohio.
Kellogg, J. H., M. D	Battle Creek, Michigan.
Kittrell, B. F., M. D	Black Hawk, Mississippi.
Knowles, L. D., M. D	Kendall, Michigan.
Le Hardy, J. C., M. D	Savannah, Georgia.
Lindley, Walter, M. D	Los Angeles, California.
Logan, J. P., M. D	Atlanta, Georgia.
Lowman, Prof. J. H	Cleveland, Ohio.
Mallett, J. W., M. D	University of Virginia.
Minor, T. C., M. D	Cincinnati, Ohio.
Moore, R. C., M. D	Omaha, Nebraska.
Mosher, J. S., M. D	Albany, New York.
Nagle, John T., M. D	New York, New York.
Neal, Thomas L., M. D	Dayton, Ohio.
Needham, W. C. H., M. D	Gallipolis, Ohio.
Ockford, G. M., M. D	Burlington, Vermont.
Oulton, W. B., M. D	Saint Louis, Missouri.
Parr, T. S., M. D	Indianola, Iowa.
Porcher, F. P., M. D	Charleston, South Carolina.
Putnam, J. M., M. D	Chelsea, Masssachusetts.
Rumbold, T. F., M. D	Saint Louis, Missouri.
Saunders, L. L., M. D	Grenada, Mississippi.
Smith, N. G., M. D	Lewisville, Indiana.
Snow, E. M., M. D	Providence, Rhode Island.
Stabler, E. A., M. D	Alexandria, Virginia.
Staples, F., M. D	Winona, Minnesota.
Stearns, J. H., M. D	Milwaukee, Wisconsin.
Stedman, Joseph, M. D	Jamaica Plain, Massachusetts.
Stone, M. C., M. D	Newburgh, New York.
Summerell, J. J., M. D	Salisbury, North Carolina.
Tadlock, A. B., M. D	Knoxville, Tennessee.
Van Eman, J. H., M. D	Kansas City, Missouri.
Wall, John P., M. D	Tampa, Florida.
Wells, E. F., M. D	Minster, Ohio.
Wey, H. D., M. D	Elmira, New York.
Woodworth, P. M., M. D	Chicago, Illinois.
Young, B. S., M. D	Santa Rosa, California.

THE NATIONAL BOARD OF HEALTH.

OFFICERS.

JAMES L. CABELL, LL. D., &c. ..... *President.*
JOHN S. BILLINGS, Surgeon United States Army ..... *Vice-President.*
THOMAS J. TURNER, Medical Director United States Navy ..... *Secretary.*

MEMBERS.

PRESTON H. BAILHACHE, M. D., U. S. M. H. S., 1316 R st., N. W., Washington, D. C.
SAMUEL M. BEMISS, M. D., &c., 558 Saint Charles street, New Orleans, La.
JOHN S. BILLINGS, M. D., United States Army, 80 Gay street, Georgetown, D. C.
HENRY I. BOWDITCH, M. D., &c., 113 Boylston street, Boston, Mass.
JAMES L. CABELL, M. D., &c., University of Virginia, Va.
HOSMER A. JOHNSON, M. D., &c., 4 Sixteenth street, Chicago, Ill.
ROBERT W. MITCHELL, M. D., &c., 34 Madison street, Memphis, Tenn.
SAMUEL F. PHILLIPS, esq., Solicitor-General, 1119 K street, Washington, D. C.
STEPHEN SMITH, M. D., &c., 31 West Forty-second street, New York.
THOMAS J. TURNER, M. D., U. S. N., 1227 M street, N. W., Washington, D. C.
TULLIO S. VERDI, M. D., &c., 815 Fourteenth street, N. W., Washington, D. C.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 18, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ... Portland	34,000	4	10	15.0	3	...	1	1	...	...	...	...	...	...	...	...	...	...	...
N. H ... Concord	14,000	3	7	25.9	1	...	1	...	...	1	...	...	2	...	...	...	1	...	...
Vt ... Burlington	16,500	3	4	12.6	...	...	1	...	...	...	...	...	...	...	...	...	...	2	...
Mass ... Boston	375,000	80	174	24.2	34	2	50	8	3	...	...	...	6	...	12	...	2	68	5
Cambridge	52,800	7	17	15.4	2	3	...	...	...	...	...	...	1	...	1	...	...	...	...
Edgartown	1,294	...	2	8.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
New Bedford	27,000	3	6	11.7	...	...	1	...	...	...	1	...	...	...	...	...	...	2	2
Newburyport	13,800	1	1	3.7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marblehead	7,285	...	3	20.9	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...
Nantucket	3,777	2	4	55.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plymouth	7,094	...	3	22.1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Fall River	49,000	18	24	25.6	3	...	1	1	...	1	...	...	2	...	...	...	...	...	...
Lowell	59,340	16	26	22.8	2	...	9	...	3	...	...	...	...	...	...	...	1	14	1
Lawrence	39,000	4	15	20.1	1	...	1	...	2	...	...	...	1	...	...	...	...	...	1
Pittsfield	12,300	...	1	4.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Worcester	58,000	11	23	20.6	1	...	8	...	2	...	...	...	...	...	...	...	...	...	...
Lynn	38,400	4	11	15.0	1	...	2	1	...	...	...	...	...	...	...	...	...	...	1
Brockton	13,608	2	5	18.7	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Bridgewater	3,725	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Milford	9,200	1	4	23.2	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...
Chicopee	11,000	1	1	4.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fitchburg	12,600	3	5	20.1	1	...	2	...	1	...	...	...	...	...	...	...	...	...	...
Somerville	25,000	2	6	12.5	2	...	1	...	...	...	...	...	...	...	...	...	...	1	...
Springfield	33,000	7	18	28.5	1	...	1	1	...	1	...	...	2	...	...	...	...	4	...
R. I. ... Providence	104,862	13	26	12.9	5	1	4	1	3	...	1	...	2	...	1	...	...	11	...
Conn ... New Haven	63,000	5	13	10.6	3	1	...	1	...	...	...	...	1	...	...	...	...	3	...
Waterbury	20,300	7	10	26.0	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
N. Y ... New York	1,203,823	232	533	23.1	100	11	76	26	10	6	5	...	51	3	...	...	1	153	16
Brooklyn	564,448	116	247	22.8	47	7	27	21	1	8	5	...	24	...	3	...	2	79	5
Yonkers	19,000	4	7	19.2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poughkeepsie	20,200	2	8	20.8	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Newburg	18,043	3	3	8.7	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Utica	34,000	9	18	27.6	4	...	2	...	...	...	...	...	2	...	...	...	3	...	...
Rochester	90,000	9	33	19.1	3	...	1	2	...	...	...	...	...	...	...	...	...	...	...
Buffalo	155,159	29	60	20.1	7	1	10	5	5	1	1	...	3	1	...	...	1	25	...
Watertown	10,606	2	2	9.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cambridge	1,850	...	1	29.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seneca Falls	6,000	...	2	17.4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Port Jervis	10,000	1	2	10.4	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
N. J ... Hudson County	209,000	41	90	22.4	8	...	12	9	2	3	1	...	6	...	...	...	...	28	3
Newark	137,000	27	58	23.3	4	3	4	2	2	1	...	...	4	...	...	...	1	10	...
Orange	13,213	4	5	20.1	...	...	2	1	...	1	...	...	...	...	...	...	...	...	...
Camden	41,714	6	13	32.7	...	...	4	...	1	...	...	...	1	...	...	...	...	2	...
Plainfield	8,000	2	3	19.6	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Pa ... Philadelphia	850,000	91	261	16.0	46	2	...	6	10	1	3	...	3	...	...	6	...	...	...
Pittsburgh	156,649	21	61	20.0	6	1	6	9	12	...	1	...	3	...	...	...	...	23	6
Erie	28,565	4	11	20.4	1	...	...	1	...	...	...	...	2	...	...	...	...	3	...
Md ... Baltimore	393,796	48	139	18.4	29	5	17	5	7	1	6	...	5	...	...	...	...	42	4
District of Columbia	180,000	38	84	24.3	12	1	5	6	1	11	...	...	9	...	...	...	1	26	2
Va ... Norfolk	27,200	4	14	27.1	4	...	3	2	...	1	...	...	...	...	...	...	...	6	2
Richmond	64,670	19	34	27.6	5	1	4	...	1	1	...	...	...	...	...	...	1	8	1
Lynchburg	16,500	1	3	9.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
N. C ... Wilmington	17,600	3	7	20.8	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...
S. C ... Charleston	57,000	11	30	27.4	4	...	1	...	1	...	...	...	3	...	...	...	...	...	...
Ga ... Augusta	27,012	6	10	19.4	2	1	3	...	1	...	...	...	...	...	...	...	...	...	...
Atlanta	38,000	...	13	17.6	...	...	...	...	3	...	...	...	1	...	...	...	...	3	...
Savannah	33,248	8	23	36.3	5	...	...	1	1	1	...	...	...	...	...	...	1	...	...
Brunswick	2,900	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fla ... Jacksonville	10,000	1	3	15.7	...	...	2	...	...	1	...	...	...	...	...	...	...	...	...
Ala ... Mobile	40,000	6	15	19.5	2	...	1	...	1	...	...	...	4	...	...	...	...	3	...
Selma	7,505	1	1	7.0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Miss ... Natchez	7,000	...	2	14.7	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Vicksburg	12,500	5	11	45.9	1	...	...	...	...	4	...	...	...	...	...	...	1	...	...
La ... New Orleans	216,359	46	127	30.6	13	...	5	1	...	21	...	...	9	...	1	...	...	...	2
Morgan City	2,018	...	2	51.7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baton Rouge	7,250	4	8	57.5	3	...	1	...	...	...	...	...	1	...	...	...	2	2	...
Tex ... San Antonio	20,597	2	8	20.3	...	...	2	...	...	...	...	...	1	...	...	...	...	2	...
Austin	16,000	2	3	9.8	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...
Tenn ... Nashville	43,543	3	12	14.2	1	...	2	...	1	2	...	...	...	...	...	...	...	5	...
Clarksville	7,250	...	2	14.4	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Chattanooga	13,000	3	7	28.9	...	...	1	...	...	...	...	...	...	...	...	...	...	3	...
Murfreesboro'	3,800	...	1	13.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ky ... Louisville	175,000	15	59	17.6	10	8	2	...	1	1	1	...	...	...	1	...	1	15	...
Ohio ... Cincinnati	280,000	37	85	15.8	12	...	10	3	...	...	2	...	4	...	...	...	2	21	2
Cleveland	175,000	...	62	18.5	4	2	7	3	2	...	1	...	4	...	...	...	...	...	...
Gallipolis	4,500	...	1	11.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dayton	39,000	6	16	21.4	1	...	2	...	2	2	...	...	3	...	...	...	...	7	2
Portsmouth	11,320	1	3	13.8	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Ind ... Indianapolis	75,350	10	28	19.1	3	...	3	1	1	3	1	...	1	...	...	...	...	12	3
Richmond	13,000	2	4	16.5	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Evansville	30,000	6	10	17.4	1	...	2	...	...	5	...	...	...	...	1	...	...	...	...
Ill ... Chicago	503,298	100	189	19.6	20	13	21	18	4	2	4	...	14	1	...	...	3	76	7
Peoria	34,850	4	8	12.0	2	...	...	...	1	1	1	...	...	...	...	...	...	...	3
Aurora	12,059	...	3	13.0	...	...	...	...	2	...	...	...	...	...	...	...	...	2	...
Elgin	8,770	2	2	11.9	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Moline	8,200	...	2	13.9	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Wis ... Milwaukee	116,000	22	37	16.7	3	...	7	4	...	...	...	...	2	...	...	...	...	12	2
Beloit	5,100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Minn ... Saint Paul	41,800	6	9	11.3	3	...	1	1	4	...	...	...	...	...	...	...	...	...	...
Mich ... East Saginaw	19,000	4	7	19.2	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...
Lansing	10,000	...	2	10.4	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Iowa ... Dubuque	28,150	...	3	5.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Keokuk	12,125	1	2	8.7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Davenport	23,000	1	4	9.1	1	...	...	2	...	...	...	...	...	...	...	...	...	2	...

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 18, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Enteric.	Malarial.	Scarlet.	Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
					FEVER.														
Mo ..... Saint Louis	331,392	51	140	22.1	13	.....	17	1	9	10	.....	.....	7	.....	1	.....	2	47	8
Nebr .... Omaha	31,000	4	11	18.9	1	.....	2	1	3	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Kans .... Lawrence	8,500	2	4	24.0	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo .... Boulder	3,030	2	3	51.7	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	5	8	16.7	.....	.....	1	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Cal ..... San Francisco	233,700	30	89	19.9	17	.....	4	.....	1	1	.....	.....	5	.....	.....	3	.....	11	4
Sacramento	21,500	.....	9	21.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	5	7	32.4	1	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	2	2	9.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Totals	8,253,607	1,329	3,225	20.2	468	58	374	150	110	98	34	.....	198	5	28	10	30	734	91

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING SEPTEMBER 18, 1880.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass .... Boston	370,000	5,000	168	6	23.6	62.6
R. I ..... Providence	100,862	4,000	26	1	13.4	13.0
Md ..... Baltimore	338,384	55,412	108	31	16.6	29.2
District of Columbia	120,000	60,000	42	42	18.2	36.4
Va ..... Norfolk	15,900	11,300	9	5	29.5	23.1
Richmond	39,970	26,700	10	24	11.1	47.1
S. C ..... Charleston	25,000	32,000	7	23	14.6	37.4
Ga ..... Savannah	18,229	15,019	8	15	22.8	51.9
Augusta	16,182	10,830	2	8	6.5	37.5
Atlanta	22,000	16,000	4	9	9.5	29.5
Brunswick	1,500	1,400	.....	.....	.....	.....
Ala ..... Mobile	28,000	12,000	5	10	9.3	43.5
Selma	3,425	4,080	1	.....	15.2	.....
Fla ..... Jacksonville	6,000	4,000	1	2	8.7	26.1
Miss .... Natchez	3,500	3,500	1	1	14.9	14.9
La ..... New Orleans	159,128	57,231	76	51	24.9	46.5
Tenn .... Nashville	27,874	15,669	5	7	9.2	24.1
Clarksville	4,000	3,250	1	1	13.0	16.1
Chattanooga	8,000	5,000	4	3	26.4	31.4
Murfreesboro'	2,000	1,800	.....	1	.....	29.0
Tex ..... Austin	12,000	4,000	2	1	8.7	13.0
Ky ..... Louisville	153,125	21,875	47	12	16.0	29.4
Iowa .... Keokuk	11,165	960	2	.....	9.3	.....
Ohio ..... Portsmouth	10,320	1,000	3	.....	15.2	.....
Kans .... Lawrence	6,800	1,700	4	2	30.7	61.4
Totals	1,503,364	373,726	536	255	18.5	35.6

The following reports, for the week ending September 18, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 6; under 5 years, 4; consumption 2; croup 2; diarrhœa 1. Bath, Me., 8,000; deaths, 4; consumption 1; diarrhœa 1. Belfast, Me., 5,301; deaths, 3; under 5 years, 2; diarrhœa 1. Brattleboro, Vt., deaths, 3; diarrhœa 1. Bucyrus, 3,950; deaths, 1. Calais, Me., 6,162; deaths, 1; malarial fever 1. Cedar Keys, Fla., 1,700; no deaths. Chillicothe, Ohio, 11,000; deaths, 6; under 5 years, 3; consumption 2; diarrhœa 3. Circleville, Ohio, 6,400; deaths, 3; consumption 1; accident 1. Clinton, Mich., 1,205; no deaths. Columbus, Miss., 4,747; deaths, 1; accident 1. Corinth, Miss., 2,264; deaths, 1; consumption 1. Crystal Springs, Miss., 955; deaths, 1; under 5 years, 1. Dallas, Tex., 10,300; deaths, 6; under 5 years, 2; enteric fever 3; malarial fever 1. Decatur, Miss., 1,000; no deaths. Dixon, Cal., 1,200; deaths, 1; under 5 years, 1; diarrhœa 1. Fayette, Miss., 400; deaths, none. Fernandina, Fla., 3,000; no deaths. Helena, Mont., 3,630; no deaths. Hernando, Miss., 1,000; deaths, 1. Huntingdon, Pa., 4,500; deaths, 2; malarial fever 1; accident 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 1. Kenosha, Wis., 5,500; deaths, 2; diarrhœa 1. Lebanon, Pa., 9,000; deaths, 3; consumption 2. Louisiana, Mo., 5,200; deaths, 3. Martinsburg, W. Va., 6,384; deaths, 1; consumption 1. Meridian, Miss., 4,013; deaths, 3; under 5 years, 1; diarrhœa 1. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; deaths, 2; under 5 years, 1; malarial fever 1. Monmouth, Ill., 6,000; deaths, 2; under 5 years, 1; croup 1. Mount Pleasant, Iowa, 4,500; deaths, 1; under 5 years, 1. Muscatine, Iowa, 8,412; deaths, 3; diarrhœa 1; accident 1. Muskegon, Mich., 11,300; deaths, 2; malarial fever 1. Niles, Mich., 4,200; no deaths. Okolona, Miss., 2,000; no deaths. Oshkosh, Wis., 17,030; deaths, 8; under 5 years, 3; consumption 1; diarrhœa 3; lung disease 2. Painesville, Ohio, 5,500; no deaths. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; no deaths. Pleasant Hill, Miss., 252. Port Royal, S. C., 750; deaths, 2; under 5 years, 1; consumption 1; croup 1. Rock Island, Ill., 12,000; deaths, 4; under 5 years, 4; diarrhœa 3. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 21,000; deaths, 7; under 5 years, 3; consumption 1; diarrhœa 2; scarlet fever 1. Starkville, Miss., 1,450; deaths, 1; pneumonia 1. Steubenville, Ohio, 13,500; deaths, 1; under 5 years, 1. Summit, Miss., 1,808; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 2; under 5 years, 1; entric fever 1. Tuskaloosa, Ala., 2,000; deaths, 2; under 5 years, 1; diphtheria 1; malarial fever 1. Winchester, Va., 5,000; deaths, 1; accident 1. Winona, Minn., 10,000; deaths, 1; consumption 1. Total population, 289,449; deaths under 5 years, 31; total deaths, 93; annual rate per 1,000, 16.8.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Canada	Kingston	16,000	Sept. 18	1	3.3													
Bahamas	Nassau, N. P	13,000	Aug. 14	4	16.1			16	4									84
Do	do	13,000	Aug. 21	3	12.0			33	3									83
Do	do	13,000	Aug. 28	1	4.0			24	1									83
Do	do	13,000	Sept. 4	2	8.0			5	2									82
Do	do	13,000	Sept. 11															83
Cuba	Havana	195,437	Sept. 11	137	36.6				17		4		2					84
Guadeloupe	Point a Pitre	22,919	Aug. 7	26	59.2				2									
Do	do	22,919	Aug. 14	16	36.4				2									
Do	do	22,919	Aug. 21	7	15.9													
Do	do	22,919	Aug. 28	16	36.4													
St. Domingo	San Domingo	8,000	Aug. 8	2	13.0										1			86
Do	do	8,000	Aug. 15	4	26.1													87
Do	do	8,000	Aug. 22	2	13.0													86
Do	do	8,000	Aug. 29	7	45.7								1					87
Do	do	8,000	Sept. 5	12	75.3													85
Hayti	Cape Haytien	7,500	July 24	7	48.7													
Do	do	7,500	July 31	2	13.8													
Do	do	7,500	Aug. 7	7	48.7													
Do	do	7,500	Aug. 14	6	41.7													
Do	do	7,500	Aug. 21	5	34.8													
Do	do	7,500	Aug. 28	6	41.7													
Do	do	7,500	Sept. 4	9	62.7													
Do	do	7,500	Sept. 11	8	55.7													
Do	Aux Cayes	9,000	Aug. 21	4	23.2													85
Do	do	9,000	Aug. 28	5	29.0													87
Do	do	9,000	Sept. 4	4	23.2													87
Do	Jacmel	6,000	June 6	2	17.4													
Do	do	6,000	June 13	4	34.8													
Do	do	6,000	June 20	2	17.4													
Do	do	6,000	June 27	4	34.8													
Do	do	6,000	July 4	12	104.2													
Do	do	6,000	July 11	11	95.6													
Do	do	6,000	July 18	7	60.9													
Do	do	6,000	July 25	3	26.1													
Do	do	6,000	July 31	11	95.6													
Do	Port au Prince	30,000	Sept. 1	10	17.4													93
Do	do	30,000	Sept. 8	13	22.6													92
Mexico	Acapulco	3,500	Aug. 21	3	44.7													83
Do	do	3,500	Aug. 28	3	44.7													82
Do	do	3,500	Sept. 4	3	44.7													82
Do	Matamoras	16,000	Sept. 11	7	22.7													
Teneriffe	Santa Cruz	16,610	Aug. 21	6	18.8							1						81
Do	do	16,610	Aug. 28	7	22.0							1				1		81
Ireland	Queenstown	10,000	Sept. 11	6	31.2													
Do	Belfast	230,000	Sept. 11	103	29.4					4		16	3					57.3
Do	Dublin	314,666	Sept. 11	209	34.5								1		4		24	56.8
Scotland	Dundee	155,100	Sept. 4	50	16.8							1		1		6		63.4
Do	Leith	58,479	Sept. 11	38	33.8												5	57.6
Do	Glasgow	589,598	Sept. 4	162	14.3												6	62.4
England	London	3,664,169	Sept. 4	1,460	20.8				5		17		4				97	67.3
Do	Bristol and Clifton	213,500	Sept. 4	108	26.4								1				6	64.9
Do	Tunstall	171,826	Sept. 4	105	31.1								1				4	
Do	Bradford	197,196	Sept. 4	91	24.1												3	59.9
Do	Leeds	318,929	Aug. 28	183	29.9												10	59.3
Do	do	318,929	Sept. 11	165	27.0												1	
Do	Sheffield	304,938	Sept. 11	167	28.6													60.5
Wales	Cardiff	82,364	Sept. 11	49	30.9								1				10	63.1
France	Paris	1,988,806	Sept. 2	985	25.9						49		31				104	
Do	do	1,988,806	Sept. 9	1,009	26.4						32		33				70	
Do	Rouen	104,902	Sept. 11	57	28.4													
Switzerland	Zurich	22,103	Sept. 14	10	23.6													
Holland	Amsterdam	316,052	Sept. 4	153	25.2								7				8	70
Do	Rotterdam	150,378	Sept. 4	62	21.5											8		
Do	do	150,378	Sept. 11	70	24.3											9		
Germany	Breslau	276,000	Aug. 28	194	36.0								3				36	63
Do	Hamburg	400,000	Aug. 21	253	33.0												10	
Do	Berlin	1,096,644	Aug. 28	661	31.3							48	10			127	4	68
Do	Cologne	141,639	Sept. 4	104	38.2												20	
Do	do	141,639	Sept. 11	107	39.3								1				20	
Do	Bremen	109,000	Aug. 28	44	21.1												3	
Do	Frankfort	129,000	Sept. 4	40	16.2												2	77
Do	Brunswick	74,000	Sept. 4	44	31.0										1		1	
Do	Barmen	95,000	Sept. 4	36	19.7													62
Saxony	Chemnitz	92,137	Aug. 28	70	39.7													70
Do	Leipsic	150,836	Sept. 4	89	30.7								1				4	62
Do	Dresden	220,500	Aug. 28	128	30.2													63
Belgium	Antwerp	173,643	Aug. 28	118	35.4					24	9	12	4			3	2	
Do	do	173,643	Sept. 4	104	30.3					20	13	14	13			3	2	
Do	Brussels	406,638	Sept. 4	216	27.6								3				5	
Denmark	Copenhagen	235,254	Aug. 31	114	25.3					1		15				9		62
Italy	Genoa	185,000	Sept. 11	99	27.9													72
Austria	Vienna	746,243	Aug. 28	329	19.7						14		5				8	65
Do	do	746,243	Sept. 4	324	20.5						8		2				10	64
Do	Trieste	128,233	Aug. 21	105	42.7						4		2					
Do	do	128,233	Aug. 28	82	33.4						6		2					
Russian Polland	Warsaw	357,169	Aug. 28	239	34.9													62
Sweden	Stockholm	169,429	Aug. 28	105	33.5								1				10	62
Norway	Christiania	116,801	Aug. 28	62	27.6							9				6	6	59
Do	do	116,801	Sept. 4	62	27.6							21	1			4	7	62
Spain	Cadiz	65,028	Sept. 4	41	32.9													79
Morocco	Tangier	15,000	Aug. 14	28	97.4					4		1		1				89.2
Do	do	15,000	Aug. 21	35	121.6					6		2		3				90.1
Barbary	Tripoli	20,000	Sept. 4	18	47.0													96
Egypt	Alexandria	220,000	Sept. 4	220	52.2													
Cape Colony	Cape Town	35,000	Aug. 23	16	23.9													63
India	Calcutta	429,535	Aug. 7	187	22.7		3		2		7						1	81.1
Do	do	429,535	Aug. 14	185	22.4		4				8							82.5
Do	Bombay	644,405	July 27	359	29.0				2								149	79.4
Do	do	644,405	Aug. 3	316	24.5		1										152	80.5
Do	do	644,405	Aug. 10	406	32.8				1								172	79.6
China	Shanghai	2,197	Aug. 17	1	23.7							1						78.8
Do	do	2,197	Aug. 24	1	23.7													75.6
Japan	Kobé	18,282	Aug. 21	9	25.7													
Do	do	18,282	Aug. 28	17	48.5													

National Board of Health

BULLETIN.

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FOSTER, M.D. 283 E. 55TH ST. N.Y.

THE FEVER ON THE LOWER MISSISSIPPI.

NEW ORLEANS, *October* 4, 1880.

SIR: Definite information of the existence of a suspicious form of fever in Plaquemine Parish, La., on the Lower Mississippi, having been received by the member of the National Board of Health resident in New Orleans, George M. Sternberg, surgeon, U. S. A., was requested to visit the locality, examine such number of cases as might be necessary to enable him to determine the nature of the fever, and report the result of his investigation to the New Orleans member. Surgeon Sternberg was selected for this duty because of his extensive and intimate acquaintance with the fevers of the Gulf coast and Spanish Main; because of the recognized skill and ability which had led to his being chosen one of the experts on the Havana Yellow-Fever Commission, and to his being intrusted with the duty of preparing the article on yellow fever in the supplement to Ziemssen's Cyclopedia, and also because of his position as a United States Army medical officer, which, while it removed him on the one hand from the probability of having his judgment or conclusions influenced by local or personal considerations, on the other, devolved upon him the responsibility of representing an extremely sensitive professional body.

On the 10th of September, Dr. Sternberg made a detailed report, in which, after reciting the history of the sickness from the appearance of the first case, early in August, up to the date of his investigation, he positively asserted the existence of yellow fever of a mild type, with a low rate of mortality, except where the disease was aggravated by vicious local conditions. In the area where this prevailed, Dr. Sternberg also found a malarial fever, attributed by the local physicians to exposure in the rice harvest, and which they called rice fever.

Upon receipt of this report a telegram was sent to the executive committee asking that, if Dr. Sternberg's opinion was of sufficient weight, an appropriation of from five thousand to ten thousand dollars be made from the contingent fund and placed at the disposal of the Louisiana State board of health for use in the necessary preventive measures. The appropriation was immediately ordered, and a tender of the sum was made, as above indicated, on the 13th of September.

Recognizing only the existence of the so-called rice fever, the State board declined the offer of the National Board and claimed to have "instituted such measures as it deemed necessary." Up to this time the action of the Louisiana member, representing the National Board of Health, had been governed by that portion of sec. 3 of the act of June 2, 1879, which makes it the duty of the board to "co-operate with and, so far as it lawfully may, aid State and municipal boards of health in the execution and enforcement of the rules and regulations of such boards to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, and into one State from another."

The rejection of this proffer to "co-operate and aid," however, now made it incumbent upon the National Board, through its representative, to take such steps as might determine whether the contingency was grave enough to warrant action under that clause in section 3 which directs the board to "report the facts to the President of the United States," whose duty it then is to use the Executive authority in executing and enforcing the necessary rules and regulations. With this object the member of the National Board of Health resident in Memphis was summoned to New Orleans, and, after careful consideration of all the facts, it was decided to send a commission of three medical gentlemen to the compromised locality, and to base the action of the board upon the report of said commission. These gentlemen (selected with the approval of the auxiliary sanitary association) were Dr. J. Dickson Bruns, of New Orleans, Dr. J. P. Davidson, of the Louisiana State board of health, and Surgeon Sternberg, U. S. A., and they were accompanied on their mission by the Tennessee member of the National Board, the Louisiana member being prevented by his only partial convalescence from a recent attack of the prevailing dengue.

Without entering upon any discussion of the two reports made, the one by Drs. Bruns and Davidson, and the other by Surgeon Sternberg, it is sufficient for the present purpose to say that it was made evident, as well by the conflicting reports of the commission as by the personal observation of the Tennessee member, that no practical benefit could now be attained from Executive interference.

Whatever danger had threatened the public health of the Mississippi Valley had either passed away—the disease having run its course—or it had been so widely scattered that preventive measures on any adequate scale were impracticable for the time being.

Considering the advanced stage of the season, the favorable health conditions of the valley, the more than doubtful utility of any steps still possible looking to isolation, disinfection, &c., and the desirability of avoiding overt action likely to create anxiety and apprehension, if not positive panic—these considerations have induced the representatives of the board to refrain from recommending further action in the premises at the present time.

They cannot, however, close this report without placing themselves on record as fully accepting and indorsing Surgeon Sternberg's conclusions, to wit:

1. That yellow fever (about 100 cases) existed between August 1 and September 10 in Plaquemine Parish, Louisiana.

2. That the outbreak had its origin in the immediate vicinity of the Mississippi River quarantine station, the first case, August 1, occurring directly opposite the point where the infected bark Excelsior was detained from July 11 to August 16.

3. That while the type of the disease was generally mild, vicious local conditions existed which aggravated it into the most fatal form, four dying in one family out of five attacked.

The details of the investigations upon which these conclusions are based will be found in the accompanying reports of Surgeon Sternberg.

All of which is respectfully submitted,

S. M. BEMISS,
Member National Board of Health, New Orleans, La.
R. W. MITCHELL,
Member National Board of Health, Memphis, Tenn.

To the SECRETARY OF THE NATIONAL BOARD OF HEALTH,
Washington, D. C.

[Copy of letter sent o Joseph Jones, M. D., President Louisiana State Board of Health.]

NEW ORLEANS, LA., *September* 13, 1880.

SIR: I respectfully call your attention to the accompanying report from Dr. G. M. Sternberg, regarding the disease at this time prevailing on the lower coast of the Mississippi River. In my opinion, the symptoms and mode of spread bear so close a resemblance to yellow fever that no time should be lost in applying all possible means to prevent its further spread. With a view to the accomplishment of this end, I have to inform you that you are authorized to draw upon the National Board of Health for such sums of money as may be necessary to procure disinfectants and to pay for the services of sanitary police, and sanitary inspectors, and in truth all expenses expedient to the purposes mentioned. This money cannot be drawn from the Treasury except in payment of bills for services or articles, which bills must be duly authenticated. You will therefore make requisitions from time to time for such service, disinfectants, &c., as are in your opinion required, and forward same to me. This appropriation will apply to cases of infectious disease in this city, and in all places within the limits of the State which have no local boards to exercise such powers. The organization of the work will rest with yourself, subject to the approval of the National Board. You will therefore in all cases forward me the names of persons recommended to be employed, with pay of each, and each one must take an oath of office, and have his name carefully entered upon blank pay-rolls which will be furnished you, and then no trouble will occur in regard to payments. It is well to remark that the Treasury Department refuses to pay for goods or clothing destroyed to prevent spread of disease, but will pay any reasonable expenses for cleaning and disinfectants.

S. M. BEMISS.

Dr. JOSEPH JONES,
President Louisiana State Board of Health.

Dr. S. M. Bemiss, of New Orleans, member of the National Board of Health, writes under date of September 8 that he has instructed Dr. G. M. Sternberg, of the United States Army, to investigate and report upon the character of a fever prevailing on the lower coast of the Mississippi, and especially in the vicinity of Point á la Hache.

The report of Dr. Sternberg and that of Drs. Bruns and Davidson are given below:

[Copy of report by Dr. George Sternberg, U. S. A.]

NEW ORLEANS, *September* 10, 1880.

SIR: I have the honor to report that, in compliance with your request, I have visited Point Michel and Pointe á la Hache, for the purpose of ascertaining the nature of the sickness prevailing there. Dr. Hays, in whose practice most of the cases have occurred, aided me in every manner possible, and in his company and that of Dr. Taylor, who represents the State board of health, I visited about twenty cases of the prevailing fever. Many of Dr. Hays' patients are convalescent, but in the practice of Dr. Heber, on the opposite side of the river, I found three recent cases in one house and three in another distant five miles from the first. In one of these houses we also found the dead body of Andrew Dragon, a light mulatto, aged 17, who died about two hours before our arrival. Dr. Hays has had in his practice 61 cases, and Dr. Heber, so far as I could learn, 7 cases of the prevailing fever. The first case occurred August 15th, in the practice of Dr. Hays, on the right bank of the river, seven miles below his house.

The following day a case occurred two miles above the first. On the 20th (August) another case occurred in the vicinity of the first, and 1 within two miles of Dr. Hays' house. On the 22d, 2 cases; on the 23d, 2 cases, and on the 24th 2 cases were taken sick in the neighborhood of the first case; on the 24th 3 cases also occurred in a locality one and one-quarter mile above the doctor's house. This was followed by 3 on the 25th and 3 on the 26th in the same locality. Dr. Hays was also called to see a case on the opposite side of the river, four miles below his house, on the 23d. In the locality one and one-fourth mile above Dr. Hays' house four children have died in the family of —— Girdeau. The two remaining children in the family had been seriously sick, but at the time of my visit appeared to be convalescent. A young man named Littel, aged 19, also died in this vicinity, making 6 deaths in all, on both sides of the river, in a total of 68 cases. It is not my intention at present to study this local epidemic from an etiological point of view. I desire simply to state the facts as I was able to glean, in a single day, which have a bearing upon the question of diagnosis. While abundant rains fell during the month of August above and below this vicinity, I am informed that for a month, until quite recently, there was no rain in this immediate neighborhood; also, that a disagreeable odor was observed to come from the *batture* along the river bank. Rice is cultivated extensively in the vicinity, and one or two of the cases were taken sick while at work in the rice fields. I would observe here, however, that nearly all of the cases are young children, and that the adults who, by reason of their exposure in the rice fields, would be most subject to malarial poisoning, have to a great extent escaped. The cases have mostly been children of French creoles—light mulattoes—who constitute the greater portion of the population in this vicinity. I inquired as to whether any of the cases had previously suffered from yellow fever, but could not get any very definite information. A similar fever prevailed in 1878, which some physicians called yellow fever, but Dr. Hays believes it also to have been malarial fever. The area in which this fever prevailed, on the right bank of the river, was somewhat different from that in which most of the cases have occurred this year. The fever of 1878 did not extend below a certain point, while the fever of this year has been mostly below this line. As to the nature of the disease, it is a continued fever of a single paroxysm, lasting, it is said, from a few hours to four or five days. No regular temperature observations have been made, but from the statements of Dr. Hays, and my own observations, I am satisfied that the fever is of a mild grade, and not characterized by remissions or intermissions. The highest temperature observed by me was 103½° (second day of disease). At the outset of the attack the eyes are glistening, pupils more or less dilated, gums bright red and swollen, tongue slightly or heavily coated with a white fur, in some cases almost clean, and in one dry and brownish. The skin is usually moist and perspiring. In two cases I noticed that the excitement caused by our presence caused the perspiration to cease and the skin to become dry. Pulse rather soft and not very frequent (in two cases, second day, in which I counted it was 100). Slight pain in head and loins, at commencement of attack. Afterwards no pain was complained of, except occasionally some epigastric distress. There was bilious vomiting at the outset in some of these cases. In others no vomiting occurred. In only one of the fatal cases (child of Girdeau) was there a suspicion of coffee-ground vomit. One or two had nose-bleed at the commencement of the attack. No other hemorrhages are reported. Dr. Hays had not discovered any albumen in the urine of his fatal cases. In Dr. Heber's fatal case the urine was highly albuminous, and suppression occurred 16 hours before death. The depending portions of the body of this young man presented a mottled appearance two hours after death. His natural color was light yellow. I did not discover any decided yellowness of the conjunctivæ in any case. Yellowness of the skin I could hardly have distinguished, on account of the complexion of the patient. I found albumen in three cases. Other cases in which no albumen was found were too far advanced in convalescence or too early in the disease to make the absence of albumen a point of diagnostic importance. In one case, in which the most abundant deposit of albumen occurred—a boy of 12—the boy was dressed and sitting up. He had slight fever, glistening eyes, red spongy gums, and slight headache. Finally, as to the diagnosis, I believe these cases to correspond with what is known in the Antilles and tropical America as *fièvre inflammatiore, fièvre d'acclimation, fièvre jaune bénigne, fièvre jaune abortive, fièvre jaune des Creoles, dengue*, etc. Bérenger-Feraud says of these fevers, "These fevers may exist sporadically, like the yellow fever, and also epidemically, *but it is above all at the approach or decline of the epidemics of yellow fever that they are observed in the greatest number.* They present different forms; the most frequent form is observed among peoples *who are subject to be attacked by yellow fever.* It offers all the symptomatic appearances of the first degree of yellow fever, coloration of the skin and eyes, elevation of temperature and pulse, cephalalgia, rachialgia, contusion pains in the limbs. But whatever may be the intensity of these symptoms they all disappear at the end of 24 or 48 hours, and recovery takes place." In 1875 Bérenger-Feraud lost but three cases in 400, and in 1876 one case in 210. Such is the resemblance of this form of fever with the first degree of yellow fever that when it is observed sporadically without an epidemic of yellow fever the doctors of the country say, "If we were in the time of yellow fever we would say that it is yellow fever." Bérenger-Feraud claims that this fever prevails everywhere that yellow fever reigns, and says "It is a disease very near if not identical with yellow fever—an incomplete yellow fever." For me this fever is identical with yellow fever, and only differs in degree from the more severe forms which, because of the fatality which attends them, are known and dreaded by all. It seems to me extremely unscientific to make our diagnosis depend upon a greater or less percentage of mortality, and the sooner physicians in the yellow-fever zone admit, what I believe to be true, that yellow fever is not always a malignant disease, and that the immunity of creoles is due to their having suffered (generally in childhood) from this milder form of the disease which has received so many different names, and that it is not a birthright, the better will it be for the progress of medical science and the true interests of the countries where these diseases prevail.

Dr. S. M. BEMISS,
Member National Board of Health.

SECOND REPORT OF DR. GEORGE M. STERNBERG, U. S. A., MEMBER OF COMMISSION VISITING POINTE À LA HACHE AND VICINITY.

I regret to say that I can find no good reason for changing the opinion, given after my first visit to Point Michel, as to the nature of the fever prevailing in that vicinity. I have not seen during either visit any case which, *alone*, would enable me to make a positive diagnosis of yellow fever, but from a consideration of all the cases seen by me during my two visits, and of the facts relating to the origin and progress of the epidemic, cannot doubt that this fever is the mild type of yellow fever which has been described under various synonyms given in my previous report, and which Blair more properly calls "yellow fever *simplex*" to distinguish it from the more malignant type called by him "*gravior*." The main facts upon which I base this opinion are the following: The first cases, so far as I can learn, occurred in the practice of Dr. Westerfield directly opposite the quarantine station, about the 1st of August. It will be remembered that the infected bark Excelsior was anchored at this point for eleven days, from June 24 to July 5. No cases occurred in Dr. Westerfield's practice for four or five days after the first case, when six cases occurred in one family, 1½ miles below, then seven cases in another family about the middle of August. It was about this time (August 15) that Dr. Hays saw his first case, 7 miles down the river from his house. This locality subsequently furnished a considerable number of cases (at least 15). Later (August 24), an infected locality was developed 1½ miles above Dr. Hays's house; up to this time no deaths had occurred, but in this locality four children died in one family, and a young man in the immediate neighborhood still later. September 4, the fatal case of Adrian Dragou and other mild cases in the same family occurred in the practice of Dr. Hébert, on the east bank of the river, and several miles farther up stream. In the practice of Dr. Wilkinson, on the west bank of the river, and just above Dr. Hays's, no cases of the same fever have occurred. Dr. Westerfield says that his cases occurred mostly where there is a batture on the river front; where there was no batture he had no cases. He says the disease has taken the same course as in 1878. He does not recollect that one of the cases of this year had fever in 1878. The majority were French children. Has had some severe cases with great irritability of stomach, but no deaths. Did not examine the urine or make temperature observations. The theory that this fever results from malarial emanations from rice fields seems to me untenable from the history of this epidemic, as above given, from the fact that adults are most exposed to these emanations, while children are most subject to this fever, and that in various localities where rice is cultivated, as in Dr. Wilkinson's practice, this fever has not prevailed. I am informed that a similar fever does prevail at Port Eads where there are no rice fields. There is, however, in this vicinity a pilot's village and a custom-house station, so that it is presumable that communication with infected vessels occurs before these vessels are subjected to disinfection, &c. I am also informed that communication between this point and the city of New Orleans

is unrestricted. At the quarantine station I find a little settlement of two or three houses within a few hundred yards of the wharf, over which the quarantine physician has no control. The facilities for intercourse with infected vessels are certainly not insurmountable, and I find, moreover, that river packets which touch all along the banks of the river on their way up and down from New Orleans are in the habit of tying up for the night at the quarantine wharf. There is, therefore, no difficulty in accounting for the introduction and dissemination of a disease such as I suppose this to be, and from my point of view the battures along the river bank furnish favorable local conditions for the increase of the specific poison of the disease during the summer months. As to the clinical history I have no reason to believe that all the cases of fever on the river banks have been of the same nature. Drs. Wilkinson, Hébert, and Hays all state that cases of intermittent fever constantly occur in their practice, and doubtless autumnal remittents prevail to some extent. Temperature observations have only been made in a few cases, but the history given me by Dr. Hays and Dr. Hébert of the cases which I have seen, is of a continued fever of a single paroxysm, lasting from twenty-four hours to four or five days. I have obtained an incomplete record of temperature in two cases only. Tommy Gilmore, aged 10, was taken sick at *midnight* Sunday (September 12); no chill; temperature 106°; Monday morning temperature 105°, evening 104°.5; Tuesday morning, 104°; Wednesday 3 p. m., 103°; Thursday morning, 101°.6. I was unable to obtain a specimen of urine for examination in this case. Michael Halcum, aged 25 (?), says he had yellow fever in 1867, taken sick at 10 a. m., Sunday (September 12); temperature Sunday noon, 103°; Monday morning, 101°.8+, evening 102°.2+; Wednesday morning, 101°. Has albuminous urine, highly acid, and containing granular tube casts. In one case, in the practice of Dr. Jones, a relapse occurred from exposure before complete convalescence was established. We found this patient, a boy of 12, very much prostrated, and having highly albuminous urine of acid reaction, containing granular tube casts. This is the fifth case in which I have found albumen in the urine, and that in a fever which is chiefly characterized by the mildness of its course and the absence of distressing symptoms—a very different fever, in my view, from the high grade of malarial fever, with a tendency to local congestion and hemorrhages, which occasionally presents the phenomenon of albuminous urine. In one case, in the stages of calm the patient had a pulse of 60 beats in the minute. I should say, from my observations, that this fever is characterized by rather a slow (after the first day) and soft pulse, a perspiring skin, a clear intellect, and an irritable stomach. I did not observe yellowness of the skin or conjunctivæ in any case; but do not look upon this symptom as a common characteristic of the milder form of yellow fever. My experience in regard to this point corresponds with that of Blair, who says: "It certainly must be admitted that a large proportion of the cases of yellow fever are unattended by yellowness of the surface or even of the eye, for the disease may be cut short by treatment (?), or the epidemic may be of the simplex grade, or the mitior and the yellow suffusion may be so slight as to escape notice." The total number of cases has been about 100, exclusive of those occurring in the practice of Dr. Westerfield, whose figures I did not obtain.

The temperature chart in the case of Dr. Wilkinson, jr., as given by Dr. Finney, certainly justifies a diagnosis of remittent fever; but, as already stated, the history given by Dr. Hays and Dr. Hébert, both upon my first and second visit, was of a continued fever. Dr. Wilkinson, sr., the most experienced practitioner in the vicinity, who has been called to see many of the severe cases, in consultation, made an unqualified diagnosis of yellow fever. He is perfectly familiar with malarial fevers of the country, and has seen much of yellow fever; has had cases of malarial fever in his practice this fall, but considers the severe cases of continued fever which he has seen in the practice of Drs. Hébert and Hays as undoubted cases of yellow fever. Dr. Hébert evidently is much inclined to agree with Dr. Wilkersen. Dr. Hays insists that the disease is a malarial fever *of the same type as he saw in* 1878, which some practitioners in the vicinity called at the time yellow fever, but which he has never admitted to to have been yellow fever.

Respectfully submitted.

GEO. M. STERNBERG,
Surgeon, U. S. A.

THE RICE FEVER.

Reports of Doctors Bruns and Davidson on the fever which prevailed in Plaquemines Parish.

No. 142 Canal Street, New Orleans,
September 18, 1880.

Dear Sir: In obedience to your request of the 14th of September, that I should "proceed to the lower coast of the Mississippi River to inspect and report in regard to the prevalence of any infectious or other forms of fever prevailing in that section of the State," I have the honor to report that, on the morning of the 15th, at 8 a. m., the committee, consisting of Dr. J. P. Davidson, of the State board of health; Dr. G. M. Sternberg, surgeon United States Army, and myself, with Dr. Mitchel, of the National Board, who kindly accompanied us, and my son, Mr. H. D. Bruns, who volunteered to make the necessary autopsies, if opportunity offered, proceeded on the steamtug Aspinwall directly to Myrtle Grove, the plantation of Dr. J. B. Wilkinson, the oldest and most experienced physician in the parish of Plaquemines. We there learned that the doctor had been called to visit a case of fever on the left bank of the river, seven miles below, in consultation with the resident physician, Dr. N. M. Hebert. We reached the place designated, five miles above Pointe-a-la-Hache, too late to meet Dr. Wilkinson, but had the good fortune to encounter Dr. Hebert, who, with great courtesy, at once invited us to see his patient, a typical case, as he regarded it, of the prevailing fever. The following was his account of the case:

Paul Gravolet, white, male, aged 22 years, had sat up for two nights with Adrian Dragou, sick of the fever, and had afterwards attended his funeral. It was the body of this A. Dragou which Dr. Sternberg had seen on his previous visit to the parish and noticed in his report. A short while after, on the afternoon of the 10th, Gravolet was taken with a chill, followed by a violent headache, pain in the loins and legs, nausea, retching, and fever. Dr. Hebert visited him for the first time on the 12th instant at 8 a. m., and found him suffering from fever, with a hot, dry skin; temperature not noted. The vomiting of bile and mucus continued; the eyes were congested; the tongue moist, streaked in center, red at tip and edges, and was covered with a white fur; the fur had disappeared on the fourth day, leaving the whole organ red; the gums were red and swollen, but firm; there was much restlessness throughout the attack; the respiration was tranquil, without sighing; he complained of slight pain or pressure over epigastrium; the urine had been abundant, and free from albumen; there had been no delirium; comp. cath. pills, followed on Monday by calc., magnes., had acted freely, and quinine, in 4-gr. doses, until 52 grains were taken—in 48 hours—had been ordered, after the action of the magnesia. The doctor could not say that he had noticed any decided remission at the period of his visits, morning and evening, but had sometimes found him perspiring. He had broken his thermometer and could not tell what the diurnal variations of temperature may have been.

At the time of our visit, 1.30 p. m., September 15, the pulse was 80 to the minute, temperature 101 $\frac{1}{4}$° Fahrenheit, respiration normal, tongue clean, gums pink and firm, skin pleasantly warm and soft, presenting no harshness nor pungency to the touch; the face was flushed, without capillary congestion; the body was of the natural color, and neither it nor the eyes showed the least tinge of yellowness; the *facies* was perfectly calm and the patient cheerful. He complained of some pain or pressure over stomach and abdomen. At 11 a. m. he had passed a small quantity of bright, florid blood by stool. The urine was abundant. A fresh specimen, tested on the spot, yielded, on the addition of nitric acid, a light precipitate, which cleared up perfectly on boiling. At our second visit, a little after noon the following day, we found him still convalescing. He had passed a little bright blood by stool during the night, but had slept well. The pulse was 60 to the minute, temperature 99 $\frac{3}{5}$° Fahrenheit. No albumen in urine.

In the same neighborhood we saw, with Dr. Hebert, Pierre Dragou, white, male, aged 5 years, the younger brother of the above-mentioned Adrian. Three days before our visit he had recovered from an attack of fever; but two days after convalescence had partaken freely of sardines and chicken for breakfast, and at noon was seized with violent vomiting and purging. There had been no hemorrhage from bowels. The child was calm and cheerful; the skin soft and moist; the temperature carefully taken in axilla was 100° Fahrenheit. The pulse of the little patient, much excited by our presence, was by first count 110 to the minute. At the close of our somewhat protracted visit, it had fallen to 92. There had been six cases of fever in this family. All had recovered but Adrian. A small specimen of the patient's urine, very dirty, full of hairs and mucus, was secured. It threw down a flaky deposit on the addition of nitric acid, not cleared by boiling. As a substitute for filtering paper a single thickness of newspaper was tried. I thought it a clear case of failure, but if trustworthy the urine contained a trace of albumen. At our visit in the afternoon of the following day, the patient was convalescent, though still somewhat feverish.

Another patient of Dr. Hebert's visited by us in this neighborhood was Eliza Martin, white, female, aged fourteen years. She had come from New Orleans on the afternoon of the 10th, and was taken with fever three days after. She had been treated with calomel and quinine. On the second day of her fever (Tuesday) Dr. Hebert reports a well marked-remission in the morning. When seen by us on Wednesday at 3 p. m. her pulse was 120 to the minute, temperature 103$\frac{2}{5}$° Fahrenheit; the tongue soft, moist, marked by the teeth, covered with light white fur; the gums pale, pink, firm; *facies* calm; skin pleasant to touch and bedewed with slight perspiration. There was a tendency to diarrhœa, and slight pain was complained of on pressure over abdomen. Urine, tested on the spot with nitric acid and heat, was free fram albumen.

On the opposite side of the river, at the Franklin Rice Mill, we also visited, with Dr. Hebert, a patient of Dr. Hays's, Michael Halceran, a native of Louisiana, white, male, married, aged 33 years. He had been taken on the 12th at 10 a. m., with chill, violent headache and pain in back and legs, accompanied by gastric distress and vomiting. The last continued throughout his attack; but we learned from his friends, and from his physican later, that this gastric irrita-

bility characterized him even in health. He is a confirmed dyspeptic, vomits his food frequently, and is unable to retain a dose of medicine, unless it be disguised and concealed even from his suspicion. Dr. Hays informed us the next day that when he first saw Halceran, at 12 m. on Sunday—two hours after his seizure—the temperature was 103° Fahrenheit. Of his temperature Monday he had no record, and did not recall it; but on Tuesday he found it to be 101½° Fahrenheit, at his morning visit, and 102½° Fahrenheit in the afternoon. He was said to have had yellow fever during the epidemic of 1867.

At the time of our visit, we found him perfectly free of fever. He conversed cheerfully and readily, and his whole appearance was indicative of rapid and fine convalescence. The temperature was 100° Fahrenheit, pulse 62 to the minute, full, soft, slow; tongue clean and moist; no yellowness of compunctiva or skin. Auscultation of heart revealed a soft, aortic, systolic murmur. Further inquiry, afterwards confirmed by Dr. Hays, revealed the fact that the patient had suffered from more than one attack of acute rheumatic fever. The urine showed a small quantity of albumen, probably persistent.

In an adjacent town I saw Mrs. Halceran, wife of above, well advanced in convalescence from a similar attack of fever, lasting only forty-eight hours. She complained of feeling a little weak; but had a good appetite, which she had been indulging for some days freely and without harm. Though we touched at this point the following day, we did not think it worth while to visit these patients again.

Moving down the right bank of the river we stopped at Dr. George B. Hays's residence, Point Michel, and were immediately joined by the doctor, who came on board the tug, and took us to visit some of the more interesting cases of his own, then under treatment. The great majority of the patients he has had were well or convalescent.

William Gilmore, white, male, aged nine years, was taken at midnight Sunday with the usual light chill and pains in back and legs. Dr. Hays, at the date of his first visit, about noon on Monday, found him with high fever, hot, dry skin, frequent, quick pulse, white furred tongue, and free from nausea, or pain at epigastrium; the respiration was slightly hurried, without sighing, and there was no jactitation. His temperature was 106° Fahrenheit. The following forenoon it was 105° Fahrenheit; in the afternoon 104½° Fahrenheit. On Wednesday morning it was 104½° Fahrenheit. At the time of our visit, 5.20 p. m., it was 103° Fahrenheit. Although an unusually nervous child and ministered to by a still more nervous mother, who hastened to inform him that the visit of so many doctors did not necessarily portend immediate dissolution, his expression was placid, exhibiting neither alarm nor depression. The conjunctivæ were pinkish; but there was no intolerance of light, nor pain on pressure over the eyeballs. The face was slightly flushed without capillary congestion. The color of the body was natural, and there was no yellowness of skin or eyes. To the touch the surface was dry and warm, without harshness or pungency. The pulse was 100° to the minute; respiration normal, no suspiria. The bowels had been freely moved, the dejections were natural, the urine copious. There was slight uneasiness manifested on pressure over epigastrium, and headache; but he made no complaint except of slight headache.

The following day we visited him again at 10 a. m. He had slept well; had two rather thin stools during night, the last at 4 a. m.; with both had passed urine freely. The pulse was 92°; temperature 101⅗° Fahrenheit. *Facies* cheerful, skin pleasant. From the excessive nervousness of the little patient, we could not secure a specimen of urine for examination at either visit.

In this locality we also visited, with Dr. Hays, Millaudon Potoon, black, male, aged fourteen years, who was said to have had a relapse, succeeding a fever of four days' duration. We saw him again the following morning. At neither visit did he have any fever. The skin was rather cool, temperature normal, pulse soft and very compressible, but not frequent. The appetite was feeble, strength much exhausted, mind spiritless and dejected. He answered questions willingly, but slowly, and without animation. The decubitus was lateral, with the legs semiflexed, and we found him lying in exactly the same position, with the same air of utter indifference, on our second visit as we had left him on our first. He made no complaint, and on repeated inquiry admitted no special discomfort. His mother told us that he had been at work in the fields up to the date of his first attack; but the very great emaciation he exhibited was certainly not attributable to the brief acute attack he had experienced. He looked to me to be like a well-advanced case of tuberculosis, and on inquiry I learned from Dr. Hays that his father had died of phthisis pulmonalis. Dr. Hays had never examined his chest, and his condition and surroundings were such as not to invite my personal auscultation of him. A specimen of his urine exhibited, on the usual tests, an abundance of albumen.

In the same room lay a younger brother of Millaudon, convalescent from a mild attack of the fever.

At the quarantine station, which we reached at 9 p. m., we found to our regret the assistant quarantine physician, Dr. C. P. Wilkinson, down with the fever. He had been taken with the usual symptoms of chill, headache, pain in the back and legs, at 6 a. m. on Sunday, the twelfth, and when visited by us on Wednesday at 10 p. m. was, therefore, within 8 hours of completing his fourth day. The quarantine physician, Dr. Finney, had kept an accurate record of his temperature—the sole instance in which we had the fortune to obtain it—from which it appeared that, on seizure, his temperature was 100½° Fahrenheit. At noon the same day it was 103, and the same in the evening.

	Temp. Fahr., °.
Monday morning	101
Monday afternoon	104
Tuesday morning	101
Tuesday afternoon	104
Wednesday morning	101
Wednesday afternoon	104
And at 10 p. m., as taken by myself	103

He had, when we saw him, a hot skin; broad, moist tongue, covered with white fur; pulse 90, full, soft, regular; no precordial nor abdominal distress nor vomiting throughout the attack. He had taken quinine in ten-grain doses three times on day of attack, but owing to the irritation it excited, had at first moderated and then discontinued its use. Wednesday he had taken two three-grain doses. He talked to us with unusual animation and energy that night, and the following morning when we visited him, a little after daybreak, we found him perfectly free from fever, in high spirits, and only anxious to resume as soon as possible the duties which he has performed with so much zeal, fidelity, and intelligence.

Dr. Wilkinson is a native of Louisiana, aged 30 years. He stated that he had had an attack of yellow fever, in common with other members of his family, in 1855.

At an early hour the following morning, September 16, we crossed the river to Buras's post-office, which lies immediately opposite the quarantine station. There we had the pleasure of meeting with Dr. Westerfield, whose practice extends for many miles above and below that point. The sum of the information gathered from him was to the effect that the fever had prevailed very extensively in that neighborhood—principally above—which he attributed to the batture, there being a caving bank, washed by the river below. The fever had made its first appearance early in August, and about ten days thereafter had spread through the entire settlement, as many as five, six, and seven cases occurring in single families, and in some of these death by yellow fever had happened in 1878. The majority of his cases had been among white children. Negroes enjoyed, seemingly, more immunity, and females still greater. The average duration of the fever was about 48 hours, he thought. It yielded readily to quinine; fevers chiefly of the remittent type, though he had seen a few intermittents. There had been no death in his practice, nor had he seen a single case in which there was jaundice, black vomit, or suppression of urine.

Dr. Jones, whose area of observation and practice lies on the same bank of the river, between that of Dr. Westerfield and that of Dr. Hays, and with whom we passed some time later in the day, had treated about thirteen cases in all. There was, he thought, a well-marked remission in every case he had seen, but he had made no thermometric observations. The exacerbation took place toward night. The fever yielded readily to quinine, which he gave freely. The only difficulties he had experienced in the management of his cases arose from the tendency to undue cerebral excitement in children. He had lost none, nor had he seen any case with jaundice, black vomit, or suppression of urine.

Dr. Ryan told Dr. Davidson that at Pilot Town the same fever had prevailed extensively. He regarded it as a malarial fever, remittent in type. It yielded readily to quinine. He had no death in his practice, nor had any of his cases been attended with yellowness of skin or eyes, or black vomit, or suppression of urine.

Visiting, with Drs. Hays, Hebert, and Jones, who joined us, such cases of special interest as we had seen on the previous day, we reached Myrtle Grove about 2 p. m., and after an interesting conversation with Dr. J. B. Wilkinson—who, with two of his sons, paid us a visit on the tug—steamed directly for the city, which we reached at 6 p. m. on Thursday evening.

Through your own forethought and Dr. Mitchell's attentions we enjoyed every comfort possible on such a trip, and I take this opportunity, on the part of the whole commission, to express their deep sense of the courtesy they received from all the medical practitioners of the coast, who, with equal candor and cordiality at much self-sacrifice, devoted a large part of two days to showing us every case of interest in their practice and giving us all the information that could possibly throw any light on the object of our mission.

From personal observation, and from the information gathered on the spot, I have no hesitation in expressing, with the utmost confidence, the conviction that the disease now and lately prevailing on the lower coast is an endemic malarial fever of remittent type, and for the most part of a mild character. Its unusual prevalence is due partly to the meteorological conditions of the past summer, and partly, I believe, to the widely increased cultivation of rice. The alarm it temporarily excited was owing to its fatal results in a single family at the outset. Beyond this isolated instance it has been attended with the slightest mortality, and but for that it would have scarcely excited comment except as to its prevalence and diffusion. The diagnosis obviously lies between malarial and yellow fever, and the reasons for assigning it to the former class seem to me patent and indisputable.

In the first place, all the practitioners in the infected district

agree in the opinion, unqualifiedly expressed, that the disease is remittent fever, such as they are accustomed to treat every summer. The laity seem generally to share their views, giving the fever the trivial names, indifferently, of *la fievre du pays* or *la fievre paludienne*. Its ready amenability to quinine is, in itself, a strong proof of its miasmatic nature. If accurate records had been kept they would have been of prime assistance in arriving at certain conclusions; but, owing to loss or breakage of instruments, Dr. Hays was the only physician we met possessed of a thermometer, and the infrequency of his visits, from the great number of patients and the distances to be traveled, lessened the value of his observations as a clinical aid to diagnosis. Nor was it possible, from the most painstaking inquiry, to extract any supplemental information from the attendants or families of the sick. For the most part untrained, ignorant, careless, incapable, alike of observing or describing the most familiar phenomena, the utmost that could be hoped from them as nurses would be to give a dose of medicine at prescribed hours. Under these circumstances the general impression of the medical attendant as to the continued or interrupted course of the fever is the only evidence that can be had, and this, as I have stated, was uniformly to the effect that in all the cases diurnal remissions occurred, usually in the morning, judging from lowered pulses, diminished heat of skin, moisture, &c.

In theory and in text-books a remission is a well-defined, notable abatement, at calculable intervals, of all the more prominent symptoms of the fever, lasting for many hours. But at the bedside, especially in our graver forms of autumnal fevers, a remission is too frequently an obscure, imperfect, and ill-defined pause, as it were, between two prolonged exacerbations, filling up almost twice the entire round of twenty-four hours. The temporarily lowered pulse swiftly resumes its force and frequency; the moisture, slight and transient, extending only over the forehead, face and neck, quickly dries up, and the accurate and continued observation which marks the brief return of the same phenomena at the same hour of the succeeding day can alone truly interpret its quality and meaning.

With their imperfect opportunities and means of detecting such remissions it is scarcely to be wondered at that the physicians had no charts to exhibit. But Dr. Wilkinson was suffering when we saw him from the same type of fever that we had seen in him all day, and in his case the record kept by Dr. Finney supplies the missing link. It shows an access of fever, lasting all Sunday, with a well-marked remission in the morning and exacerbation in the evening of the following day, and the exact repetition of this rise and fall of temperature on two successive days thereafter, terminating at the end of the fourth day in a complete apyrexia.

Had a similar record been kept in all the cases, I do not doubt that it would have equally exhibited their remitting character, though doubtless in many of them the remissions may not have been so strongly marked.

So much concerning the type. Of the nature of the fever, without multiplying details, I will simply say that neither in its special features nor in their entirety could I realize a single prominent characteristic of yellow fever.

The broad, white, lightly furred tongue, moist in all stages, lacking the dry brown center or firey tip and edges; the firm gums, free from sordes or oozing, or the clear or only lightly suffused eye, not smoky or brilliant or dull, with no tinge of yellowness; the warm, pleasant skin, neither bathed in hot sweat, nor harsh, nor pungent to the touch, nor bronzed nor jaundiced nor exhibiting capilliary congestion; the universal freedom from jactitation and delirium; the normal respiration, neither hurried, nor labored, nor sighing; the *facies*, free alike from terror or depression, calm, cheerful, smiling; the notable absence of any stage of calm intervening between a primary or secondary fever or of black vomit, or tarry dejections, or suppression of the urine, or sudden cardiac syncope, render it as certain as clinical observation can that the fever is not yellow fever.

And if we except the Giordano family, the extremely light mortality is no new important factor in the conclusion. Dr. Hays attributes the death of these four children of one household to their intractableness and refusal to take medicine. Now, in the graver forms of malarial fever the early and free administration of quinine often offers the sole means of saving life; but I cannot help thinking that, in this instance, there coexisted some peculiarly malign local influence not made out, or special family predisposition not understood—a fact we are called on frequently to deplore. For of at least 150 cases that we can reckon, and doubtless a large number of others among the negroes, who neither sought nor obtained medical assistance, scattered along both banks of the river, under bad hygienic conditions, crowded in close, damp, dark, ill-ventilated rooms, seen usually late and necessarily infrequently, with no nursing or worse, lifted out of bed or seated up for every occasion, in every stage of the disease, and fed or starved as fortune favored—improperly and unseasonably often, and as the waking or the whim of the nurse chanced; out of this large number of cases, as we have said, but two deaths have occurred. Yellow fever, whenever it prevails—so far as I know—stands high among the most fatal diseases of our nosological table.

Nor is there any hint of such a march of the disease from house to house, or by personal contact, as can almost always be traced in contagious diseases breaking out among a sparse population, and never so easily traced as under such conditions as exist here, when the dwelling-houses are stretched along in one continuous and unbroken line, following the curves of the levee under which they lie.

What are the facts? Dr. Westerfield told us that his first cases occurred early in August, and by the tenth, after a pause of a few days, the whole settlement was involved. Dr. Hays gives a somewhat similar history of his section; but his first case did not occur until the 15th of August. Now the middle of Dr. Westerfield's line is directly opposite the quarantine station. Dr. Hays' practice lies many miles above. And at first sight this might seem to furnish a clue to the source of the disease, if it were yellow fever, although we know of but one infected ship, the Excelsior, at quarantine this summer, though of course many ships from infected ports have been detained there from time to time. The solution of the phenomenon, granting the disease to be malarial, is not far to seek. Owing to the shorter distance to the Gulf, and the natural configuration of the land, drainage in the lower is much more rapid than that in the upper part of this area. Mr. F. C. Brooks, a planter of the neighborhood, informs me that, although the rice matures in both sections about the same time, the difference in the time of drainage (the water being let off the fields simultaneously) is from seven to ten days, nearly. As the water is let off usually about the middle of July, the fever, as might have been anticipated, made its appearance along the river from below upwards just so soon as the hot sun of July and August could draw up from the reeking ground the miasm which, whatever its specific nature, is doubtless telluric in its origin.

Finally, the epidemic now prevailing in the parish of Plaquemines is, unhappily, not confined to the lower coast. Along both banks of the river as far up as Donaldsonville, in Jefferson, in Saint John Baptist, Saint Charles, Saint James, and Ascension, I am informed by my friends—physicians and planters—that the same or a similar fever exists. Since the latter part of June I have treated in New Orleans a fever identical with that which I found in Plaquemines, invariably remittent, and many of them far more serious than any which I saw below. A few days only before I started on this mission I had treated for a severe remittent the clerk of the *Alvin*, a packet in the lower coast trade. He was seized with the fever on the coast and brought to the city with it.

And this widespread outbreak of malaria, during the present summer, is generally attributed by the residents along the river, above and below, to the increased acreage under cultivation in rice. In a letter from Dr. E. Duffel, of Ascension, dated September 13, and received on my return, that most competent observer says: "I am very busy, having a great many cases of malarial fevers, at times very fatal, particularly if neglected at first. One of the worst complications is congestion of the brain, and few, if any, recover when thus affected. The extensive cultivation of rice in Louisiana will be very detrimental to the health of the people and a scourge."

A planter on the lower coast tells me that eight or nine years ago malarial fevers were comparatively infrequent and mild in that section, but have increased in numbers and severity just in proportion to the increase of the rice area. I do not doubt the truth of the statement, which is in strict accordance with all we know of the history of rice culture and its connection with miasmatic fevers elsewhere, notably in South Carolina and Georgia. In Louisiana two potent causes will contribute to the increased cultivation of this cereal. The poor man will give a natural preference to a crop which can be raised with small expenditure of labor and which needs no capital to take it off, and the wealthier sugar planter finds in it a valuable accessory to his main crop, harvested early, commanding cash readily, and furnishing, at the very season he most needs it, the large outlay required to convert his standing cane into a marketable commodity.

Whether the health of New Orleans will thus be endangered only time can show; but that our hitherto salubrious lowlands, if turned into paddy fields, will become hotbeds of malaria, hostile to the health and perhaps fatal to the presence of the white race, there is little reason to doubt.

I have the honor to be, very respectfully, your obedient servant,

J. DICKSON BRUNS, M. D.,
Chairman Committee on Fever of Lower Coast.

I concur with the above full and able report regarding the disease prevailing on the Lower Mississippi coast as essentially a miasmatic fever of a remittent type, occasioned by the emanations from the rice fields stretched along the coast, and its diffusion over so extended an area as probably due to the peculiarities of the present season, characterized as it has been by long-continued rains, followed, at harvest time of the rice, by very hot and dry weather. I saw no case of the fever which, in my judgment, could be said to present the diagnostic signs of yellow fever.

J. P. DAVIDSON, M. D.

S. M. BEMISS, M. D.,
Resident Member National Board of Health.

NEW ORLEANS, October 5.—Dr. F. Loeber, acting president of the Louisiana state board of health, sends the following dispatch to the National Board of Health,

through Dr. S. M. Bemiss, resident member in New Orleans:

One death from yellow fever on the night of September 4, at No. 409 South Liberty street, nearly a mile from the commercial centres, and the same distance from the harbor. Immediate burial, disinfection of premises have been enforced, and all precautions will be taken.

THE WATER SUPPLY OF CHARLESTON, S. C.

Capt. J. C. Post, of the Engineer Corps of the United States Army, having examined the water works and supply of the city of Charleston, submits the following report:

UNITED STATES ENGINEER OFFICE,
Charleston, S. C., September 14, 1880.

Dr. J. L. CABELL,
President National Board of Health, Washington, D. C.:

SIR: Having been detailed by the honorable Secretary of War, at your request, to examine and report upon certain questions in regard to the manner in which the water company of this city were laying their pipes, I have to submit the following:

The questions to be examined into, as stated in your letter, were as follows: First, as to the fact of the perforation of drains and sewers by water pipes; second, as to the methods in which this has been done; third, whether there is probable danger of contamination of the water or causing mischievous obstructions in the sewers; and, fourth, whether, in view of such probable danger, it is practicable to carry the water pipes across the line of sewers without encountering such danger.

Immediately upon receiving a notification of my detail, in accordance with your request, I addressed a letter to his honor the mayor of this city, the honorable chairman of the city board of health, and to Dr. Manning Simons, requesting that I be supplied with such information as they possessed upon the questions at issue. In reply all of these gentlemen very cordially and readily placed at my disposal all the papers they had concerning these matters, and heartily co-operated with me to make the examination complete and thorough. The city council also voted an appropriation of $300 to meet the expenses of the examinations.

As the water company at this time had not completed the laying of their pipes, I thought that much information could be gained by observing the manner in which it was being done. I accordingly watched the operations to the full extent that my other duties would permit, and saw the pipes laid in several of the streets. I also had the opportunity of witnessing the opening of a portion of one of the streets where the water pipes had already been laid some months before, and which were being taken up in order to substitute pipes of larger size. In addition to this I obtained the location of all places that I had not seen where it was thought that the drains had been seriously injured by the passage of the pipes. All of these, with a single exception where a new pavement had just been laid, were opened and examined.

In all of the streets where I saw the pipes laid, and in nearly all of the places opened for examination, I found the pipes intersecting the drains. Generally, they passed through the crown of the drain arch and were only partly inside of it, but in one instance the top of the pipe formed a portion of the floor of the drain, while in some others the pipes passed through the drain below the arch, and were wholly in the drain. In all of these latter, with the exception of four places, sufficient room had been left between the pipe and the floor of the drain for the free passage of the drainage material. Of the four places excepted, in two of them the pipe lay directly on the floor of the drain. In another instance, where the level assumed for the pipes would have seriously interfered with the flow through a large drain, the latter was cut and an iron pipe was placed below the water pipe to connect the two portions of the drain.

The system used by the water company is what is known as the constant pressure system, and the water is distributed by means of cast-iron pipes into which it is forced, either by maintaining a proper height in the stand pipe or by pumping direct into the pipes.

Before considering the possibility of contamination incident to the intersection of the drains, I think it would be well for a better understanding to give a brief description of the present condition of the drainage of this city.

Charleston is situated on a low, flat peninsula lying between the Ashley and Cooper, both salt-water rivers. Its site originally consisted of a ridge or backbone of sand rarely more than half a mile in width, bounded generally on both sides by salt marshes covered at high water, which here and there extended a considerable distance into it. Much of this salt marsh has now been filled in and forms a portion of the city, being laid out in streets and occupied by buildings. As the city grew, the first necessity which presented itself was that some means should be provided for carrying off the surface water and prevent it from being absorbed with the street and yard washings by the naturally porous soil. This led to the construction of large drains in several of the principal streets, with street and yard laterals emptying into them. These drains were generally built of brick, and emptied into the rivers or marshes on either side of the city. The laterals were also generally built of brick, though sometimes partly of wood, and a few of the more recent ones are of terra cotta piping. In their construction little or no attention has been paid to giving them a uniform depth, proper size, or slope. They are found at all depths, from near the surface to near the level of the main drains; many are too large, others too small, while some have so little slope that they but partially serve their purpose.

The main drains not fulfilling all that was required of them, in 1856 a series of tidal drains was built through some of the streets, whose principal object was to dry the subsoil and supply water for fire purposes. They were constructed at a lower level than the main drains and connect with them, I am informed, only at the points of crossing, where they pass below them by vertical openings. The system of tidal drains, though very efficient in its action, has never been extended sufficiently to affect the entire city, and there is still a large portion where the subsoil is saturated to very near the surface. This was shown by the water rising and falling with the tide in some of the trenches opened while laying the pipes. In these, especially where the ground had been made, decaying vegetable matter was also exposed, and the effluvium given off was so offensive that resort to disinfectants became necessary. None of the drains have been built with a view of carrying off the contents of the house closets.

From the foregoing, it will be seen that the question of contamination is not merely one of contamination consequent upon intersecting drains, but one of possible contamination in a more general sense, for, if the water in the pipes would become polluted where they pass through drains, it would also become polluted in the pipes passing through streets where they lay in a soil saturated with the results of vegetable decomposition, the percolations from cesspools, and the seepings from yards and streets.

It is a well-known fact, that in many of the cities of this country, as well as of other countries, water pipes pass through drains and sewers, but, so far as I can learn, there is yet to be placed on record a single case where water, conveyed in cast-iron pipes under pressure, has been poisoned by the introduction of extraneous matter or gases through a hole or leak in the pipes. Not wishing to rely wholly upon this negative proof in so important a matter, I have resorted to practical experiments to obtain data bearing directly upon this point. To imitate as nearly as practicable the condition of a leaky iron pipe in a drain or sewer, a split piece of iron pipe was obtained and placed in a receiver that could be filled either with gases or liquids. This pipe, with a pressure gauge attached to it, was connected at one end with the water pipe by means of a rubber hose, the other end being left free for the water to flow out of it. For the first series of experiments the receiver was filled with sulphureted hydrogen, a gas readily absorbed by water, and the water for the first trial was turned on full head. After allowing it to run several minutes, some of the water was caught as it passed out of the free end of the pipe and tested for the gas. The water was then turned off until the gauge ceased to register a pressure on the inside of the pipe, and, after waiting several minutes, more of the water was caught and tested. Again the water was turned off so that it barely filled the pipe in passing through, when more of it was caught and tested. The tests in the first two experiments failed to detect the presence of any of the gas, while that of the third showed that a small portion had been absorbed.

These experiments were then repeated, substituting, for the gas surrounding the pipe in the receiver, sand saturated with a solution of a salt that could be easily detected. Tests were made of the waters obtained under these conditions, but none of the salt was detected in any of them. It is highly probable, however, that if the third experiment, in which the water did not fill the pipe, could have been prolonged for a sufficient time, some of the solution of the salt would have passed into it. All of these experiments were afterwards repeated, with practically the same results, in the presence of Dr. F. Geddings, of this city, who kindly consented to be present.

As a result of the examinations and experiments made, I would state that very many of the drains of the city are perforated by the water-pipes; that in some instances the yard and street laterals are seriously obstructed; but, so far as I could learn, none of the main drains, though many are also perforated, have been seriously affected. As to the contamination of the water while passing through the pipes, I feel justified in saying, from the results of the experiments, that it is practically impossible so long as care is taken to keep the pipes filled with the proper pressure. No leak, however small, can exist in a cast-iron water-pipe or a joint under pressure for any length of time without increasing in size and soon making itself known, either by tearing up the street or by showing a diminished pressure on the pipes should the leak or break occur in a drain where the water escaping might be carried off. In either of these cases, a properly organized water company would at once locate the break and repair the pipes. Perforations of drains and sewers by water-pipes should always be avoided as far as practicable, both on account of the probable decrease in the life of the pipe from the action of the gases and liquids and the possible obstruction of the drains and sewers, even though there is apparently sufficient room for the flow to pass beneath them. From what I have seen, it appears that it would have been practicable for the water company

to have laid their pipes so as to have avoided many of the drains that they now perforate. At the same time I do not believe that it would have been possible to have laid the pipes without perforating some of the drains where they exist at all levels as they do in this city.

Before closing this report I wish to acknowledge my thanks to Prof. C. W. Shepard, jr., of the Charleston Medical College, and his assistant, Mr. Robinson, for their valuable aid and assistance while conducting the experiments, and also to Dr. W. T. Wragg for his kindness in supplying me much important information.

Dr. Manning Simons, of Charleston, makes the following remarks on the above report, closing with an extract from the *Sanitary Record* of January 9, 1875, relating to water-pollution in the English town of Over-Darwen:

I received to-day the report of Capt. J. C. Post, United States Engineers, on the Charleston water works, and I send you this brief communication to complete the history of this matter.

Captain Post's report admits the perforation and obstruction of drains, so that this question is disposed of.

The effect on the public health of the obstruction of drains and the resulting collection of sewage, sewage-overflow, and percolation of soil, is too obvious to need comment.

In relation to the question of contamination of the water by the passage of the pipes through the drains, he says: * * * "So far as I can learn, there is yet to be placed on record a single case where water conveyed in cast-iron pipes under pressure has been poisoned by the introduction of extraneous matter or gases through a hole or leak in the pipes." I beg leave, in this connection, to submit, as a part of this history, an article in the "Sanitary Record, a journal of public health," published in England, entitled "The secret of Over-Darwen." The facts in this case are worth all the laboratory experiments that can be produced.

The epidemic in the case of Over-Darwen was due to water contaminated by sewage, through a leak in a water-pipe, and manifested great "ferocity." On this occasion 2,035 people were attacked, and 104 deaths occurred.

The report on the Charleston works indirectly defends the passage of the water-pipes through the drains, by alluding to the nature of the made-land of which portions of this city are composed.

Permit me, in this connection, to call attention to the fact that the report does not touch upon the manner of construction of the reservoir from which the water is to be distributed. This was spoken of particularly in my papers on this matter.

This reservoir is situated in the middle of the city; is sunk 22 to 25 feet (I cannot give the exact figures) *below* the surface, and between the water of the reservoir and the subsoil water and the "made-land," to which the report alludes, there is no other barrier than a few courses of brick and cement and a little puddled clay.

[From the Sanitary Record.]

THE SECRET OF OVER-DARWEN.

The materials for the history of the epidemic at Over-Darwen have been nearly completed. The secret of the outbreak is most impressive and deeply instructive. It has been worked out by Dr. Steven, whom Mr. Simon dispatched on behalf of the Local Government Board. The origin of the outbreak was strikingly simple, as we have the story on good authority. The details of course will be ascertained in the official report which will be shortly published. Typhoid fever, as Mr. Simon has never ceased to reiterate now for many years, is a "filth fever," and the specific poison is commonly conveyed by the excremental pollution of drinking-water, or of any other potable fluid, as in the Marylebone milk epidemic. The first case of typhoid imported into Over-Darwen occurred in a house at a considerable distance from the town. The sufferer contracted the disease, came home, and died with it. The distance of this house from the town, and the circumstance that its sanitary arrangements were held to be good, and that there was no apparent communication from the house with the water drank by the sufferers in the fierce epidemic, directed attention from this important case, which nevertheless proves to be the *vera causa*. On first inquiry it was stated that the town derived its water-supply from a distant and unpolluted source, and that the water was brought by covered channels into the town, and could by no possibility be polluted by the excreta from this first case. On the first aspect of the facts this seemed to be true. A more minute investigation revealed a startling contradiction of it. The drain of the closet into which the excreta of the first typhoid patient were passed emptied itself into a neighboring field, for agricultural purposes. Through this field passed also the water-main, conveying the water-supply of the bulk of the inhabitants of Over-Darwen. At the point of supposed contact of the pipe with the drains, special precautions had been taken to prevent any infiltration of sewage into the water, but when the earth was dug up to ascertain how far these precautions were efficient, it was found that just above the spot where the cement and other segregating materials had been placed, there was a leak, which allowed the contents of the drain to be sucked freely into the water-pipe, and thus, as the very typhoid poison itself was regularly thrown down the drain, it passed as regularly into the water-main, and was continuously mixed with the drinking-water of the people of Over-Darwen. Thus, on a large scale, was once more performed that shocking experiment which in surface-wells and poisoned rivulets all over the country is being frequently rehearsed. The drinking-water was mixed with a poison which is one of the most deadly that can be found in nature or devised by art. A similar experiment in the east of London produced a violent outbreak of cholera; in Over-Darwen it has produced an outbreak of typhoid. All over the country similar experiments are being tried, sometimes on a small scale and sometimes on a large scale; sometimes by placing the water-cistern of the house over the closet, and letting the overflow-pipe pass into the soil-pipe; sometimes by allowing untrapped sewer-pipes to open into dwelling-houses through closets or fixed water-basins, sometimes by drinking polluted well-water, and at others by draining a supply for whole communities from brooks and rivers liable to sewage pollution. There was a ferocity about the epidemic of Over-Darwen which arrested national attention, for 2,035 people were attacked within a very short period, and 104 deaths occurred. There is, too, a dramatic completeness in the discovery of the first cause which is impressive; but urban and rural sanitary authorities will do well to remember that if an inquest were held on every case of death from typhoid fever, as we have long contended there should be, a similar relation of fatal effect to preventable cause could nearly always be traced, and may always safely be presumed; yet of these deaths there are 20,000 annually in this country.

SANITARY SURVEY OF BAY SAINT LOUIS, MISS.

The following notes are taken from a sanitary survey of this place, made by Dr. E. Latham in September, 1880:

Bay Saint Louis is in Hancock County, Mississippi, about 15 feet above the sea level. The town was founded in 1715 and incorporated in 1850. Population in 1860 was 1,000; in 1870 it was 1,300; at present, estimated at 1,500 but increased to about 4,000 during the summer. About one-fifth of the population are foreigners. The adjoining country is level, and no grading has been done in the place. The land to the north and west is covered with pine forests, and on the south and east are the waters of the Mississippi Sound, which ebb and flow with the tides of the Gulf. No part of the city is subject to overflow. The surface soil is of white sand, and no malaria has been observed when the soil was disturbed. The water supply is from wells and cisterns; the former are usually 10 feet in depth, and placed at least 50 feet from the nearest privy. The city limits comprise about 16 square miles, and several ravines, opening into the sound, provide a good natural drainage. The line of dwellings on the principal street extends about 7 miles along the beach of the sound. There are about 400 dwellings in the corporate limits, mostly well built and wholesome residences. Garbage, &c., is thrown upon the beach, and carried off by the tide; dead animals are usually buried. There is a county board of health, organized in 1878, and composed of six members, who serve without salary. A record of deaths is kept by the clerk of the circuit court, but no system of registration of causes of death is regularly enforced. There are two cemeteries near the town, in good condition and well located; precautions are taken in all burials of persons having died of contagious disease. During the summer and autumn of 1878 yellow fever was epidemic in the town, and *dengue* fever now prevails. Cholera, small-pox, scarlet fever, diphtheria, and cerebro-spinal fever, have never been epidemic here, though small-pox is occasionally brought here from New New Orleans. Of *dengue* fever there have been about 400 cases this season, of which only four proved fatal, and in these there were complications. The disease was developed during a season of very dry weather, with warm days and cool nights, northerly winds prevailing.

QUARANTINE LAWS OF SOUTH CAROLINA (additional).

Dr. Robert Lebby, health officer of Charleston, S. C., having omitted the legislative acts of 1872 in his abstract published September 18, in No. 12 of the BULLETIN, forwards the following:

ACTS, 1872.

Act of 1868, sec. repeated as to Hilton Head, and anchorage located on the north side of Paris Island, quarantine. For St. Helena Sound it shall be as heretofore, at Morgan's Island, and a health officer appointed by the governor for two years with same compensation as the one at Hilton Head and Georgetown.

No dead bodies shall be transported when deceased from contagious or infectious diseases, to any of the cities or towns on the coast without permission from the Health Officer of Charleston between 1st April and 1st December, under penalty of $1,000, as a misdemeanor.

All permits issued by health officers shall be at the expense of the

vessel or conveyance to which such permits may be issued, and shall be collected by the health officer issuing the same. Reports of officers from Georgetown, Hilton Head, and St. Helena Sound, to the governor, abolished, and they must report to health officer at Charleston, who must make a consolidated report to the governor monthly and the legislature annually.

YELLOW FEVER AT KEY WEST, FLA.

R. J. Perry, health officer at Key West, sends the following dispatches relating to cases of yellow fever at that place:

October 4. One yellow-fever case died last night; adult, case of relapse in *dengue* from exposure.

October 7. A case of suspected yellow fever proved fatal yesterday; patient sick eight days. Another death occurred this morning, following a continued debauch, and is reported as yellow fever. These deaths were among strangers, and no new case is reported.

ABSTRACTS FROM CONSULAR REPORTS.

COLOGNE, GERMANY.—The report from this city shows a total of 564 deaths for the six weeks ending July 24, the greatest number being 116, for the week ending July 10, giving an annual rate of 42.8 per 1,000, the population being 141,000. Of the decedents, 229 were under one year of age. Among the causes of death were measles 37, scarlet fever 27, diphtheria and croup 16, whooping-cough 3, enteric fever 3, diarrhœal diseases 7, acute lung diseases 31.

GUAYMAS, MEXICO.—The report for the month of August gives a total of 23 deaths, of which 17 were of children. The health of the foreign population is generally good.

LYONS, FRANCE.—The report for the week ending August 7, gives 6 deaths from small-pox, and four from enteric fever; these diseases, with scarlet fever, measles, and whooping-cough, are prevailing. There were 156 births, being at the annual rate of 23.4 per 1,000; the deaths were 184, giving an annual rate of nearly 28 per 1,000.

SINGAPORE.—The report of United States Consul A. G. Studer, for the month of July, gives a total of 373 deaths, of which 124 were from "fever," 25 from consumption, 29 from acute lung diseases, 39 from dysentery, 13 from diarrhœa, and 11 from old age. The city and district continue to be free from epidemic and contagious disease.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

HAVANA, CUBA.—For the week ending September 24, 16 deaths from yellow fever are reported, of which ten were in the city, and 6 in the military hospitals. The following vessels are reported as infected with yellow fever: Spanish ship Voladora, for New Orleans, September 24; Spanish bark Carlos, to sail for Shieldsborough, Miss., September 26; the American bark Rachel, which came to Havana in ballast from Matanzas, and loaded with sugar at an infected wharf, sailed for Boston September 24, with a case of the fever on board. Small-pox is again on the increase, 10 fatal cases having occurred during the week ending September 24.

NOTICE.—After August 28, the reports from hospitals in the United States will be published every four weeks in a table giving the totals for that period. Only those hospitals sending reports for the four weeks will be represented in the table.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

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Balch, G. B., M. D	Yonkers, New York.
Barnard, A. F., M. D	Saint Mary's, Georgia.
Bates, C. B., M. D	Santa Barbara, California.
Betton, George W., M. D	Tallahassee, Florida.
Bibb, R. H. L., M. D	Austin, Texas.
Blain, J. S., M. D	Brunswick, Georgia.
Brewer, Charles, M. D	Vineland, New Jersey.
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Burroughs, R. B., M. D	Jacksonville, Florida.
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Cleemann, R. A., M. D	Philadelphia, Pennsylvania
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Couch, John F., M. D	Somerville, Massachusetts.
Cummings, J. B., M. D	Forrest City, Arkansas.
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Dancy, F. W., M. D	Holly Springs, Mississippi.
Delaney, E., M. D	Fond-du-Lac, Wisconsin.
Dement, J. J., M. D	Huntsville, Alabama.
Dennison, Charles, M. D	Denver, Colorado.
Dibrell, J. A., M. D	Little Rock, Arkansas.
Dorsey, R. W., M. D	Pilot Point, Texas.
Ellis, Charles M., M. D	Elkton, Maryland.
Evans, S. T., M. D	Union City, Tennessee.
Fisher, George J., M. D	Sing Sing, New York.
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Foote, G. M., M. D	Galesburg, Illinois.
Ford, D. W., M. D	McComb City, Mississippi.
Freeland, N. H., M. D	Tarrytown, New York.
French, George F., M. D	Minneapolis, Minn.
Fulgham, F. L., M. D	Crystal Springs, Mississippi.
Gerrish, F. H., M. D	Portland, Maine.
Gilliland, H. D., M. D	Gunn City, Missouri.
Grissom, E., M. D	Raleigh, North Carolina.
Harris, T. W., M. D	Chapel Hill, North Carolina.
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Hope, W. T., M. D	Chattanooga, Tennessee.
Hough, F. B., M. D	Lowville, New York.
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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 25, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Portland	34,000	4	13	19.9	2	.....	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	2	3	11.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	2	4	12.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....
Mass .... Boston	375,000	78	167	23.2	30	2	38	10	4	.....	.....	.....	7	.....	1	.....	2	63	3
Cambridge	52,800	4	21	19.1	7	1	3	.....	1	.....	.....	.....	2	.....	.....	.....	.....	5	.....
Edgartown	1,294	.....	1	40.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,268	3	10	19.1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	1
Newburyport	13,800	3	10	37.1	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	.....	2	14.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	.....	1	13.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	16	26	27.7	3	.....	1	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Lowell	59,340	13	28	22.9	5	.....	5	.....	2	.....	.....	.....	1	1	.....	.....	1	9	.....
Lawrence	39,000	5	8	10.7	2	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Pittsfield	12,300	.....	2	8.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,000	9	31	27.7	3	.....	1	1	2	.....	1	.....	2	.....	3	.....	1	.....	.....
Lynn	38,400	4	14	19.1	2	.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,608	2	3	11.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,635	.....	1	14.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	1	2	9.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,270	1	3	12.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Somerville	25,000	3	8	16.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Springfield	33,000	5	12	19.0	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I ..... Providence	104,862	13	33	16.4	10	.....	3	2	1	.....	1	.....	1	.....	.....	.....	1	7	1
Conn .... New Haven	63,000	3	14	11.4	3	1	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	4	1
East Haven	1,201	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,300	2	7	17.9	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fairfield	3,650	.....	1	14.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,203,823	267	571	24.7	83	14	82	30	7	16	3	.....	57	4	6	2	6	190	29
Brooklyn	564,448	112	239	22.1	41	9	26	30	3	9	5	.....	18	.....	2	1	2	89	9
Yonkers	19,000	.....	3	8.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poughkeepsie	21,200	2	5	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburg	18,043	3	9	26.1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Utica	34,000	4	11	16.9	3	.....	2	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Rochester	90,000	10	24	13.9	.....	.....	4	1	1	.....	.....	.....	1	.....	.....	.....	.....	6	2
Buffalo	155,159	26	60	20.1	7	.....	8	8	3	.....	1	.....	3	.....	1	.....	.....	21	2
Watertown	10,666	1	2	9.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	2	3	26.1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Lansingburg	7,150	.....	1	7.2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Port Jervis	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarrytown	3,270	.....	3	47.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	32	93	23.2	12	1	3	2	4	1	2	.....	3	.....	12	.....	.....	19	5
Newark	137,000	16	42	16.0	3	.....	5	2	2	1	.....	.....	1	.....	.....	.....	.....	11	.....
Orange	13,213	1	4	16.0	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden	41,714	4	9	11.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Plainfield	8,000	1	2	13.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	850,000	94	273	16.7	44	4	16	8	4	.....	5	.....	13	.....	1	7	1	.....	.....
Pittsburgh	156,649	28	58	18.4	2	2	3	12	3	1	2	.....	4	1	.....	.....	2	21	4
Erie	28,565	2	7	13.0	1	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Del ..... Wilmington	44,000	6	16	18.9	3	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	393,796	47	143	19.0	31	1	9	6	4	5	7	.....	3	1	2	.....	4	40	5
District of Columbia	180,000	36	78	22.5	8	1	4	5	2	10	.....	.....	6	.....	.....	.....	.....	27	1
Va ..... Norfolk	27,200	4	11	21.3	2	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....
Lynchburg	16,400	3	7	22.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	1	9	26.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
S. C ..... Charleston	57,000	11	26	23.7	5	.....	.....	.....	1	1	.....	.....	2	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	1	9	17.4	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Atlanta	38,000	7	13	17.6	2	.....	5	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Savannah	33,248	16	21	33.1	8	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	1
Rome	5,000	.....	4	41.7	1	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	6	8	41.7	1	.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Key West	12,000	3	8	34.8	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Ala ..... Mobile	40,000	6	22	28.6	3	.....	.....	.....	.....	3	.....	.....	.....	.....	1	.....	.....	3	.....
Selma	7,505	4	4	27.8	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss .... Columbus	5,230	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	.....	5	36.8	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	.....	5	20.8	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....
La ..... New Orleans	216,359	34	104	25.0	4	1	4	.....	2	10	.....	.....	6	1	.....	.....	.....	.....	.....
Shreveport	8,033	5	8	52.2	.....	.....	.....	.....	.....	3	.....	.....	1	.....	.....	.....	.....	.....	.....
Morgan City	2,018	1	1	25.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Baton Rouge	7,250	.....	1	7.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Tex ..... San Antonio	20,597	4	9	22.8	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Waco	8,000	.....	2	13.0	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austin	16,000	2	6	19.6	2	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	4	15	17.7	2	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	3	1
Clarksville	7,250	1	1	7.2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	18	43	12.8	9	1	7	.....	1	3	.....	.....	4	.....	.....	.....	.....	11	.....
Ohio ..... Cincinnati	280,000	31	81	15.1	12	1	10	2	.....	1	.....	.....	4	1	.....	.....	1	25	3
Cleveland	175,000	.....	65	19.4	5	.....	2	9	1	.....	1	.....	2	.....	.....	.....	.....	.....	1
Gallipolis	4,500	2	2	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,250	10	20	26.6	1	1	2	.....	3	.....	.....	.....	2	.....	.....	.....	.....	6	1
Portsmouth	11,320	.....	4	18.4	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	8	20	13.6	.....	.....	1	.....	2	1	2	.....	1	.....	.....	.....	.....	10	1
Richmond	13,000	7	11	19.1	1	1	1	.....	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evansville	30,000	1	3	12.3	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,298	109	200	20.7	13	13	19	22	5	1	9	.....	13	.....	2	1	1	75	7
Peoria	34,850	4	13	19.4	.....	.....	2	2	.....	2	1	.....	.....	.....	.....	.....	.....	5	.....
Aurora	12,059	.....	3	13.0	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Jacksonville	15,000	2	4	14.0	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	2	2	12.0	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,000	1	2	13.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING SEPTEMBER 25, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Wis ..... Milwaukee	116,000	24	47	21.2	7	.....	4	.....	1	.....	2	.....	4	1	2	.....	.....	8	3
Beloit	5,100	1	1	10.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn .... Saint Paul	41,800	6	15	18.8	.....	.....	2	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Mich ... East Saginaw	19,065	1	3	8.3	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint	9,000	1	5	29.0	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Iowa .... Keokuk	12,125	1	3	13.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Davenport	23,000	2	8	18.2	1	.....	.....	.....	2	1	1	.....	1	.....	.....	.....	.....	5	.....
Mo ..... Saint Louis	331,392	46	139	21.0	17	3	11	2	6	8	.....	.....	4	.....	4	.....	1	47	8
Nebr ... Omaha	31,000	1	4	6.9	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kans .... Lawrence	8,500	4	4	24.1	.....	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Colo .... Boulder	3,030	1	2	34.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ... Salt Lake City	25,000	6	7	14.6	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Cal ..... San Francisco	233,700	29	78	17.4	15	1	6	1	2	2	.....	.....	8	.....	1	.....	.....	13	3
Sacramento	21,500	1	5	12.1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	1	5	23.9	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	3	22.1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,243,134	1,300	3,181	20.0	439	64	332	173	81	98	46	.....	187	10	43	11	26	741	100

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING SEPTEMBER 25, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass .... Boston	370,000	5,000	163	4	23.0	41.7
R. I ..... Providence	100,862	4,000	31	2	16.0	26.1
Del ..... Wilmington	38,000	6,000	7	9	7.7	77.9
Md ..... Baltimore	338,384	55,412	119	24	18.3	22.6
District of Columbia	120,000	60,000	40	38	17.3	32.9
Va ..... Norfolk	15,900	11,300	7	4	23.0	18.5
S. C ..... Charleston	25,000	32,000	10	16	20.8	26.0
Ga ..... Savannah	18,229	15,019	2	19	5.7	65.8
Augusta	16,182	10,830	6	3	19.4	14.1
Atlanta	22,000	16,000	9	4	21.3	13.0
Brunswick	1,500	1,400	.....	.....	.....	.....
Ala ..... Mobile	28,000	12,000	14	8	26.1	42.8
Selma	3,425	4,080	.....	4	.....	51.2
Fla ..... Jacksonville	6,000	4,000	3	5	26.1	52.1
Miss .... Columbus	2,670	2,560	.....	.....	.....	.....
Natchez	3,500	3,500	1	4	14.9	59.6
La ..... New Orleans	159,128	57,231	72	32	23.5	29.2
Shreveport	3,916	4,117	3	5	40.0	63.8
Tenn ... Nashville	27,874	15,669	10	5	18.3	16.5
Clarksville	4,000	3,250	.....	1	.....	16.1
Ky ..... Louisville	153,175	21,825	34	9	11.5	20.1
Tex ..... Austin	12,000	4,000	4	2	17.4	26.1
Waco	5,000	3,000	.....	2	.....	34.3
Ohio .... Portsmouth	10,320	1,000	.....	4	.....	208.7
Iowa .... Keokuk	11,165	960	1	2	4.7	108.7
Kans .... Lawrence	6,800	1,700	3	1	22.0	30.7
Totals	1,550,250	384,600	539	207	18.1	27.1

The following reports, for the week ending September 25, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 7; under 5 years 1; consumption 4; diarrhœa 1; malarial fever 1. Allegheny, Pa., 78,000; deaths, 17; under 5 years, 9; consumption 3; diphtheria 3; lung disease 3. Belfast, Me., 5,308; deaths, 5; consumption 1; croup 1. Brattleboro, Vt., 6,000; no deaths. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years 1; consumption 1; diarrhœa 1. Calais, Me., 6,142; deaths, 2; consumption 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 6; under 5 years 1; consumption 1; enteric fever 1; malarial fever 1; accident 2. Circleville, Ohio, 6,400; deaths, 3; under 5 years, 1. Clinton, Mich., 1,205; deaths, 1. Corinth, Miss., 2,264; deaths, 1; under 5 years, 1; malarial fever 1. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,300; deaths, 4; under 5 years, 1; diarrhœa 1; malarial fever 1. Decatur, Miss., 1,000; no deaths. Dixon, Cal., 1,200; deaths, 1; accident 1. Fayette, Miss., 400; no deaths. Fernandina, Fla., 3,000; death, 1. Gun City, Mo., 150; no deaths. Helena, Mont., 3,630; deaths, 2. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., 1,200; no deaths. Iuka, Miss., 816; deaths none. Jefferson, Tex., 3,251; death, 1; under 5 years, 1; puerperal 1. Kenosha, Wis., 5,500; death, 1. La Salle, Ill., 10,000; deaths, 5; under 5 years, 2; diarrhœa 2; scarlet fever 1. Lebanon, Pa., 9,000; deaths, 4; under 5 years, 1; consumption 1; croup 1; enteric fever 1; lung disease 1. Louisiana, Mo, 5,300; no deaths. Madison, Ind., 9,009; deaths, 5; under 5 years, 2; diphtheria 1; enteric fever 1. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; deaths, 2; malarial fever 1. Monmouth, Ill., 6,000; deaths, 3; under 5 years, 1; lung disease 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,412; deaths, 1; scarlet fever 1. Muskegon, Mich., 11,300; deaths, 8; under 5 years, 1; consumption 2; diarrhœa 1; diphtheria 2; enteric fever 1; malarial fever 2. Niles, Mich., 4,200; death, 1. Okolona, Miss., 2,000; no deaths. Painesville, Ohio, 5,504; deaths, 1; under 5 years, 1; diarrhœa 1. Pass Christian, Miss., 3,500; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,602; deaths, 2; consumption 1. Pleasant Hill, Miss., 253; no deaths. Port Royal, S. C., 750; no deaths. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., 12,000; deaths, 5; under 5 years, 1; enteric fever 1; malarial fever 1. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 21,000; deaths, 7; consumption 1; enteric fever 1; lung disease, 1. Starkville, Miss., 1,423; no deaths. Steubenville, Ohio, 13,500; deaths, 2; under 5 years, 2. Summit, Miss., 1,808; no deaths. Tampa, Fla., 734; no death. Titusville, Pa., 9,000; no deaths. Verona, Miss., 1,000; death, 1; malarial fever 1. Winchester, Va., deaths, 4; under 5 years, 2. Winona, Minn., 10,000; deaths, 2; consumption 1; puerperal 1. Youngstown, Ohio, 15,089; deaths, 7; under 5 years, 3; consumption 1; diarrhœa 2; lung disease 1; accident 1. Total population, 354,485; deaths under 5 years, 32; total deaths, 114; annual rate per 1,000, 16.9.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	Sept. 18	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
Canada	Kingston	16,000	Sept. 25	5	16.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59.1
Bermuda	Hamilton	14,867	Sept. 21	1	3.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76.1
Do	do	14,867	Sept. 28	5	17.5	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....	79.3
Cuba	Havana	195,437	Sept. 18	152	40.6	.....	.....	.....	17	.....	10	.....	3	.....	.....	.....	.....	82
Trinidad	Port of Spain	30,000	July 17	38	66.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	do	30,000	July 24	19	33.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	Matamoras	16,000	Sept. 18	5	16.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Brazil	Rio de Janeiro	330,000	Aug. 28	169	26.8	.....	.....	.....	2	.....	1	.....	4	.....	.....	.....	7	.....
Do	Pernambuco	126,575	Aug. 8	55	22.7	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....
Do	do	126,575	Aug. 15	63	26.0	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....
Do	do	126,575	Aug. 22	63	26.0	.....	.....	.....	.....	.....	11	.....	1	.....	.....	.....	.....	.....
Do	do	126,575	Aug. 29	61	25.1	.....	.....	.....	1	.....	5	.....	1	.....	.....	.....	.....	.....
Do	do	126,575	Sept. 5	60	24.7	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....
Do	Bahia	135,000	July 31	87	33.4	.....	.....	.....	.....	.....	2	.....	1	.....	1	.....	.....	.....
Do	do	135,000	Aug. 7	91	34.9	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
Do	do	135,000	Aug. 14	88	33.7	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....
Do	do	135,000	Aug. 21	90	34.5	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Do	do	135,000	Aug. 28	89	34.1	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....
Ireland	Queenstown	10,000	Sept. 18	5	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Sept. 18	79	22.6	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	2	54.2
Do	Dublin	314,666	Sept. 18	237	37.7	.....	.....	.....	.....	.....	1	.....	4	.....	3	.....	34	53.9
Do	Londonderry	30,884	Sept. 11	9	15.2	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	56.6
Scotland	Dundee	155,100	Sept. 11	40	13.5	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	6	.....	58.4
Do	Glasgow	589,398	Sept. 11	198	17.5	.....	.....	.....	.....	.....	.....	.....	.....	13	.....	.....	15	58.4
Do	Leith	58,479	Sept. 18	19	16.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	54.7
England	London	3,664,169	Sept. 11	1,391	19.8	.....	.....	.....	.....	.....	5	.....	15	.....	2	.....	89	62.8
Do	Liverpool	544,056	Sept. 11	402	39.0	.....	.....	.....	.....	.....	.....	16	9	15	1	23	30	60.3
Do	Bristol and Clifton	213,500	Sept. 11	98	23.9	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	7	61
Do	Tunstall	144,549	Sept. 11	101	36.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	65.5
Do	Sheffield	304,938	Sept. 18	161	27.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.9
Wales	Cardiff	82,364	Sept. 18	42	26.5	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	10	58.5
France	Paris	1,988,806	Sept. 9	1,009	26.4	.....	.....	.....	.....	.....	32	.....	33	.....	.....	.....	70	.....
Do	do	1,988,806	Sept. 16	881	23.1	.....	.....	.....	.....	.....	11	.....	38	.....	.....	.....	57	.....
Do	Havre	92,068	Sept. 11	90	50.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
Do	Lyons	342,815	Aug. 28	196	29.8	.....	.....	.....	.....	.....	11	.....	15	.....	.....	.....	4	.....
Do	do	342,815	Sept. 4	191	29.0	.....	.....	.....	.....	.....	6	.....	14	.....	.....	.....	4	.....
Do	do	342,815	Sept. 11	172	26.2	.....	.....	.....	.....	.....	7	.....	11	.....	.....	.....	3	.....
Do	Rouen	104,902	Sept. 18	51	25.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Zurich	22,103	Sept. 11	4	9.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Amsterdam	316,952	Sept. 11	184	30.3	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	5	67
Do	Rotterdam	150,378	Sept. 18	69	23.9	.....	.....	.....	.....	.....	.....	2	1	.....	.....	13	.....	.....
Germany	Berlin	1,096,644	Sept. 4	713	33.8	.....	.....	.....	.....	.....	.....	45	10	.....	1	121	81	67
Do	Barmen	95,000	Sept. 11	47	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	4	65
Do	Brunswick	74,000	Sept. 11	46	32.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....
Do	Breslau	276,000	Sept. 4	165	31.1	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	28	68
Do	Frankfort	130,000	Sept. 11	40	16.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
Do	Mannheim	50,500	Sept. 11	20	20.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Do	do	50,500	Sept. 18	23	23.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
Do	Hamburg	400,000	Aug. 28	236	30.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....
Do	Bremen	109,000	Sept. 4	41	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saxony	Leipsic	150,836	Sept. 11	83	28.6	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	6	64
Do	Dresden	220,500	Sept. 4	126	29.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	11	63
Do	Chemnitz	94,382	Sept. 4	96	54.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	68
Belgium	Antwerp	173,643	Sept. 11	97	29.1	.....	.....	.....	.....	20	8	17	2	.....	.....	3	1	.....
Do	do	173,643	Sept. 18	89	24.7	.....	.....	.....	.....	19	5	31	3	.....	.....	2	.....	.....
Denmark	Copenhagen	235,254	Sept. 7	162	36.0	.....	.....	.....	.....	.....	.....	22	2	.....	.....	13	.....	65
Italy	Venice	141,004	Aug. 7	61	22.5	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	4	70.5
Do	do	141,004	Aug. 14	59	21.8	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	.....	71.5
Do	do	141,004	Aug. 21	61	22.5	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	3	73.5
Do	do	141,004	Aug. 28	76	28.0	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	7	71.7
Austria	Vienna	746,243	Sept. 11	371	22.9	.....	.....	.....	.....	.....	6	.....	2	.....	.....	.....	7	66
Roumania	Bucharest	177,646	July 31	109	32.0	.....	.....	.....	.....	.....	3	.....	6	.....	.....	.....	5	.....
Do	do	177,646	Aug. 14	103	30.2	.....	.....	.....	.....	.....	2	.....	3	.....	.....	.....	11	.....
Hungary	Buda-Pesth	344,604	Aug. 28	229	34.6	.....	.....	.....	.....	.....	2	.....	4	.....	.....	.....	.....	.....
Russia	Warsaw	357,169	Sept. 4	257	38.5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	65
Sweden	Stockholm	169,429	Sept. 4	99	31.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	64
Norway	Christiania	116,801	Sept. 11	65	28.9	.....	.....	.....	.....	.....	.....	17	.....	.....	.....	8	8	59
Portugal	Oporto	108,346	Aug. 21	86	57.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Do	do	108,346	Aug. 28	88	58.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Do	Lisbon	225,152	Aug. 21	138	32.0	.....	.....	.....	.....	.....	1	.....	8	.....	.....	.....	.....	70
Spain	Seville	138,000	Aug. 29	83	31.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	19	86
Do	do	138,000	Sept. 5	90	34.0	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	18	86
Do	Alicante	34,926	Sept. 11	20	29.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Cadiz	65,028	Sept. 11	37	29.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
India	Calcutta	429,535	Aug. 21	210	25.5	.....	.....	.....	.....	.....	.....	.....	12	.....	.....	.....	1	82.9

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, OCTOBER 16, 1880. [No. 16.

FOSTER, M.D. 281 ST. N.Y.

THE PROPOSED STATE BOARD OF HEALTH FOR VERMONT.

Below will be found the draft of an act to establish a State board of health and vital statistics, which is coming before the legislature of the State of Vermont at its present session.

It is to be hoped that nothing will occur to delay or prevent the passage of this act, for it is certainly time that Vermont should provide for such an important part of the duty of a State to its citizens as is connected with the care of the health of the people, and the registration of all births, marriages, and deaths within her borders. It is not clear from the terms of the act as to what the salary of the secretary is to be, for it cannot be supposed that it is to be included in the clause which provides that the whole expense of the board for services rendered shall not exceed five hundred dollars per annum. To perform the duties required of the secretary of the board by this act will require the whole time of a professional man, and he should be paid accordingly. It is poor policy and bad economy to either offer or accept insufficient pay for services of this kind.

PROPOSED ACT TO ESTABLISH A STATE BOARD OF HEALTH AND VITAL STATISTICS FOR THE STATE OF VERMONT.

It is hereby enacted by the general assembly of the State of Vermont:

SECTION 1. The governor, by and with the advice and consent of the senate, shall appoint six persons, who, with a secretary, appointed as hereinafter provided, shall constitute a State board of health and vital statistics for the State of Vermont.

The terms of office of the persons so appointed shall be so arranged that the terms of two of them shall expire at the end of every second year. Vacancies in the board shall be filled by re-appointment or otherwise by the same appointing power.

SEC. 2. The board shall meet immediately upon receiving notice of their appointment, at such time and place as the first-named member of the board shall designate; shall organize by the election of a president, who shall be one of their number, and of a secretary, who shall be a physician, and if not one of their number by appointment, shall by such election become a member *ex officio* of the board, and shall hold the office of secretary until another is elected.

SEC. 3. The board shall take cognizance of the interests of life and health among the inhabitants of the State, shall make, or cause to be made, sanitary investigations and inquiries respecting the causes of diseases, especially of epidemics, and the means of prevention; the sources of mortality, and the effects of localities, employments, habits, and circumstances of life on the public health; they shall also investigate the causes of epidemics and other diseases occurring among the stock or domestic animals of the State, and the methods of remedying the same, and shall gather information in respect to these matters and all other kindred subjects, which shall be committed to the board for diffusion among the people in such manner as they shall deem best. They shall also, when requested, or when in their opinion the sanitary interests of localities require it, advise with regard to the location, drainage, water supply, heating and ventilation of public buildings, and the drainage and sewerage of towns and cities.

SEC. 4. The board shall meet biennially on the second Thursday of the session of the legislature at Montpelier, and at such other times and places as in the judgment of the board the public health may require. The secretary shall be the executive officer of the board; shall superintend and perform the work prescribed in this act, and perform such other duties as the board shall direct. He shall deliver, or cause to be delivered, at least one public lecture on sanitary science and the laws of public health in each county of the State during each year; shall respond to the instructions of the State board, or to the invitations of the local boards of health, hereinafter provided for, in case of epidemics, contagious diseases, or other unusual sickness, by visiting the locality, or in such other way as may be deemed best; shall render the secretary of state any necessary assistance in preparing for publication the annual registration reports required by law, relating to births, marriages, and deaths, in the State, and shall annually report to the governor on or before the first day of August in each year the investigations, discoveries, and recommendations of the board, which shall be printed and distributed as soon as practicable thereafter, in the same manner as other public documents of the State, and the whole expense of the board for services rendered shall not exceed five hundred dollars per annum.

SEC. 5. The selectmen of each town, the mayor and aldermen of each city in the State, shall constitute a board of health, *ex officio*, for each of the several towns and cities of the State, of which the first selectman of each town and the mayor of each city shall be chairman. They shall annually, on the second Tuesday of March of each year, complete their organization by the election of a secretary, who shall be a physician, and who shall be allowed such compensation from the town or city treasury as the local boards shall direct. The local boards shall act in conjunction with the State boards in carrying out the practical intent and operations of this act, and it shall be the duty of the secretary of such local boards at least once in a year, and oftener if requested, to report to the State board of health such facts and statistics as may be required under instructions from the State board.

SEC. 6. The city or town boards of the locality concerned shall have authority, under the direction of the State board, to promulgate and enforce such regulations for the better preservation of the public health in contagious and epidemic diseases as they may deem best, and any person or persons, or corporations, neglecting or refusing, after having been duly notified in writing, to comply with the requirements of such regulations, shall, upon conviction thereof, pay into the State treasury a fine of not less than five nor more than ten dollars for each and every such offense, to be recovered upon complaint of any grand juror of the several towns or cities, before any justice of the peace competent to try the same.

SEC. 7. This act shall take effect from its passage.

ABSTRACTS FROM CONSULAR REPORTS.

BUCHAREST, September 14.—United States Consul-General Eugene Schuyler sends the following report on the sanitary condition of that city:

In sending the reports of the sanitary condition of Bucharest for the weeks ending July 31 and August 14, 1880—the only two which I have received since my residence here—I desire to call your attention to the fact that only about one-half of the total number of deaths are specifically accounted for. The reason of this is probably that the causes are mentioned only for the deaths occurring in the hospitals.

It may not be out of place for me to state certain general facts with regard to the city and its population.

Bucharest, which is situated on both sides of the small river Dambovitsa, latitude 44° 25′ N. and longitude 20° 24′ E., is, at its lowest point, 266 feet, and at its highest, 344 feet, above the level of the Black Sea, and covers a superficies of over 13,158 acres. Of these, 1,922 acres are covered with houses and court-yards, 1,141 with streets and public places, and the remainder with gardens, orchards, and uncultivated ground. The houses are nearly all of one or two stories, built either of wood or brick and covered with stucco, and generally surrounded by gardens. According to the census of 1878, there were 20,323 edifices in the city, of which 121 were churches and synagogues. This shows an increase of 6,203 buildings since 1839. About five per cent. of the streets are tolerably well paved; the remainder are either unpaved or worse than unpaved with cobble stones of varying sizes covered with dust and mud on alternate days.

There are few sewers, and the drainage is very bad. The climate is one of extremes, reaching very excessive heat in summer, and a cold of 25 degrees below zero centigrade in winter. According to the census of 1878 the population is 177,646, an increase of 55,912 over the census of 1859. Of the 177,646 population in 1878, there were 82,632 men and 95,014 women. According to religion 20,749 were Jews, 43,000 Mahommedan, and the remainder Christians, including 20,000 of other creeds. Twenty-six thousand six hundred and eighteen of the men, or 32.2 per cent., and 72,631 women, or 74.1 per cent., canneither read nor write.

The movement of the population in Bucharest is not satisfactory. According to the general report of the sanitary service in 1877, made by Dr. Felix, there were born 5,632 living children—162 less than in 1876, and still-born 64 in 1877, as compared with 81 in 1875. Of these 5,632 children, 4,292 were born of married parents, 1,199 were illegitimate, and 141 were foundlings; that is, about one in five was illegitimate. The number of marriages in 1876 was 897; in 1877 it fell to 663. This was probably in consequence of the war. In the first nine months of 1878 there were 794 marriages. In 1877 the number of deaths was 5,834, being 855 more than in 1876, and 266 more than

the births. As will be seen by the weekly statistics, the number of deaths as a general rule is greater than that of the births. The mortality is especially noticeable in children, and is, no doubt, greatly due to the bad hygienic condition of the city.

While in the Christian population the number of deaths in a year is greater than the number of births, the contrary is the case in the Jewish population, and the same thing has been observed in other towns and districts. For instance, observations in 1871 show that in eight towns, where there is a large Jewish population, in every case the number of deaths in the Christian population exceeded that of the births, while in the Jewish population the number of births exceeded that of the deaths.

The relations between births and deaths in the eight towns in 1871, were as follows: In the Christian population, total births 7,351, total deaths 10,314; excess of deaths over births 2,963. In the Jewish population, total births 4,668, total deaths 2,906; excess of births over deaths 1,762.

The sanitary condition of Bucharest is intrusted to one physician-in-chief, nine communal physicians, two veterinary surgeons, five vaccinators, and five midwives. A council of hygiene aids the communal administration. In the year ending September 1, 1878, 4,900 children were vaccinated and 239 persons were revaccinated, being in all 350 more than in 1877. The communal physicians in the same period assisted 3,279 sick persons, and the midwives assisted 152 women. In 1877 there were in Bucharest 105 doctors, 6 surgeons, 31 veterinary surgeons, and 4 dentists.

There are in Bucharest a number of good hospitals, the statistics of which I shall endeavor to send on another occasion.

LISBON, PORTUGAL.—United States Consul H. W. Diman sends the following report, under date of September 23:

I some time since received a circular from the Department of State calling my attention to the fact that the weekly returns of deaths were not sent from Setubal in this consular district. Setubal is a small place and no report of deaths is published. Lisbon and Oporto are the only places in this consular district where reports of the deaths are published, and these reports are sent regularly.

The sanitary condition of Lisbon is very good, no epidemic or contagious diseases prevailing.

During the early part of the season there was considerable fever, typhoid fever of a mild type, and much alarm was felt. There were, however, but few deaths. It was confined to certain districts, and was attributed to bad drainage. An extensive and perfect system of drainage is contemplated here, and foreign engineers have recently been making surveys with that object in view.

On the 1st of next month an abundant supply of water will be introduced into Lisbon from the river Alviella, which cannot but have a most beneficial effect on the health of the city.

SINGAPORE.—United States Consul A. G. Studer reports, under date of August 30, that there has been no epidemic or contagious disease in his consular district since his last report.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BROWNSVILLE, TEX.—Under date of September 24 Dr. E. Melon reports that since August 16, 6 new cases of small-pox have occurred, making a total of 8 cases. Of these 3 have recovered and 5 are still under treatment. None had ever been vaccinated, and the cases were all derived from the same source of infection. There is some reason to apprehend a spread of the disease, as there are many unprotected persons in the city, and a very limited supply of good vaccine virus; neither is there any hospital or other arrangement for isolating the cases.

HAVANA, CUBA.—During the week ending October 1 there were 14 deaths from yellow fever, and 78 for the month of September, 42 of which were among citizens and 38 in the military hospitals. There are supposed to be 55 cases in the city at present. The cases occurring on the Carlos, which sailed for Shieldsborough, Miss., September 26, were at once sent ashore or to hospital.

JAPAN.—Dr. Thomas H. Streets, U. S. N., with his report for the month of August from the United States Naval Hospital at Yokohama, under date of September 18, states that the American bark *Obed Baxter* sailed from that port September 9 direct for New York. She was dispatched by the China and Japan Trading Company, and her cargo consisted of rags, most of which were taken aboard at Kobé, Japan, and the remainder at Yokohama. As a severe epidemic of cholera prevailed last year over the whole region whence the rags were collected, Dr. Streets reports the vessel as an object for attention. He recommended sanitary precautions, which were not observed, and in giving a clean bill of health he noted therein the suspected nature of the cargo.

MEXICAN DELEGATES TO THE SANITARY CONVENTION.

Hon. W. HUNTER, acting Secretary Department of State, addresses the following note to the National Board of Health, under date of October 5:

Referring to the subject of the proposed international sanitary conference to be convened in this city on the 1st day of January, 1881, I have now to inform you that, in reply to the invitation sent through the minister of the United States at the city of Mexico, the government of that country has appointed Señor Don Juan N. Navarro and Señor Don Ignacio Alvarado to represent the Mexican Government at such conference. Señor Navarro is at present the Mexican *chargé d'affaires* (*ad interim*) in the United States.

MISCELLANEOUS.

The following communication has been received from the board of health of Charleston, S. C.:

OFFICE BOARD OF HEALTH,
Charleston, S. C., September 30, 1880.

SIR: I beg to transmit the following resolution adopted at a meeting of the board of health of this city, held September 29, 1880:

"Whereas, No. 12, Vol. II, of the official Bulletin from the National Board of Health September 18, 1880, and a previous associated dispatch coming from that body, contains a report (from a physician of the United States Marine Service located here) to the effect that there existed, at that time in the city of Charleston, an epidemic of break bone fever, and that there were 2,000 cases then under treatment; and whereas this board (in conjunction with the State board) being in accord with the National Board in all matters concerning the public health, and considering that any official information should emanate from and be transmitted through them to the national body; and whereas such information is calculated to injure our commercial prosperity and prejudice our sanitary condition: Therefore

"*Be it resolved*, That the chairman be requested to transmit a copy of this preamble and resolution to the National Board of Health in relation to the same, and protest against the action of the National Board in publishing statements concerning the health of this city without consultation with the officials authorized and empowered to give information of the health of the locality placed under their control."

Very respectfully,

B. F. MOISE,
Chairman Board of Health, City of Charleston.
H. B. HULBECK, M. D.,
Clerk Board of Health.

T. J. TURNER, M. D., U. S. N.,
Secretary National Board of Health.

In connection with the above, attention is called to the following section of the "Act to prevent the introduction of contagious and infectious diseases into the United States," approved June 2, 1879:

SEC. 4. It shall be the duty of the National Board of Health to obtain information of the sanitary condition of foreign ports and places from which contagious and infectious diseases are or may be imported into the United States, and to this end the consular officers of the United States at such ports and places as shall be designated by the National Board of Health shall make to said Board of Health weekly reports of the sanitary condition of the ports and places at which they are respectively stationed, according to such forms as said Board of Health may prescribe; and the Board of Health shall also obtain, through all sources accessible, including State and municipal sanitary authorities throughout the United States, weekly reports of the sanitary condition of ports and places within the United States; and shall prepare, publish, and transmit to the medical officers of the Marine Hospital Service, to collectors of customs, and to State and municipal health officers and authorities, weekly abstracts of the consular sanitary reports and other pertinent information received by said board; and shall also, as far as it may be able, by means of the voluntary co-operation of State and municipial authorities, of public associations and private persons, procure information relating to the climatic and other conditions affecting the public health; and shall make to the Secretary of the Treasury an annual report of its operations, for transmission to Congress, with such recommendations as it may deem important to the public interests; and said report, if ordered to be printed by Congress, shall be done under the direction of the board.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 2, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.		Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me	Portland	34,000	3	11	16.9	3	.....	1	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Bangor	17,000	.....	1	3.1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H	Concord	14,000	.....	7	25.9	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Vt	Burlington	16,500	4	7	22.1	1	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....
Mass	Boston	375,000	76	184	25.6	39	3	24	17	2	1	.....	.....	8	.....	2	.....	3	52	9
	Edgartown	1,294	.....	1	40.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Bedford	27,268	6	14	26.8	2	.....	3	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....
	Newburyport	13,800	2	3	11.1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
	Marblehead	7,285	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Nantucket	3,777	.....	2	27.6	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Plymouth	7,094	.....	3	22.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fall River	49,000	9	14	14.9	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lowell	59,340	16	27	23.7	4	.....	10	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....
	Pittsfield	12,300	.....	2	8.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Worcester	58,000	17	30	26.8	2	1	4	3	2	.....	.....	.....	3	.....	1	.....	3	.....	1
	Lynn	38,400	4	16	21.8	3	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brockton	13,608	1	4	15.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Holyoke	22,000	2	7	16.6	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....
	Bridgewater	2,640	2	4	79.0	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Chicopee	11,000	1	2	9.6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fitchburg	12,500	.....	5	20.6	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Somerville	25,000	2	5	10.4	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
	Springfield	33,000	4	12	19.0	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I	Providence	104,862	13	35	17.4	5	1	2	2	2	.....	3	.....	2	.....	.....	.....	.....	10	2
Conn	New Haven	63,000	3	9	7.3	1	.....	.....	3	1	1	.....	.....	1	.....	.....	.....	.....	3	.....
	Waterbury	20,300	1	4	10.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	East Haven	1,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fairfield	2,650	1	2	28.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
N. Y	New York	1,203,823	227	529	22.8	88	16	59	31	11	13	10	.....	62	.....	7	.....	8	155	18
	Brooklyn	564,448	109	225	20.8	36	16	14	31	1	10	4	.....	22	.....	1	.....	.....	82	5
	Yonkers	19,000	2	4	11.0	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Poughkeepsie	20,200	.....	3	7.8	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Newburg	18,043	2	4	11.6	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Utica	34,000	8	16	24.6	1	1	4	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....	.....
	Buffalo	155,159	25	55	18.4	9	4	3	1	3	.....	.....	.....	.....	.....	1	.....	2	14	2
	Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Seneca Falls	6,000	1	1	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Port Jervis	10,000	.....	2	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Tarrytown	3,270	.....	1	15.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J	Hudson County	209,000	35	91	22.7	9	7	3	4	2	5	.....	.....	4	.....	3	.....	.....	22	14
	Newark	137,780	16	40	15.2	5	1	3	.....	3	3	.....	.....	.....	.....	.....	.....	.....	9	.....
	Orange	13,213	2	3	12.0	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Camden	41,714	6	6	7.5	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	4	.....
	Plainfield	8,000	2	3	19.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa	Philadelphia	850,000	105	273	16.7	36	3	6	4	8	1	1	.....	7	.....	.....	5	1	.....	.....
	Pittsburgh	156,649	20	46	17.4	7	.....	3	8	2	2	4	.....	2	.....	.....	.....	1	16	1
	Erie	28,565	4	10	18.5	1	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Del	Wilmington	44,000	5	14	16.5	.....	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Md	Baltimore	393,796	50	133	17.6	19	5	8	6	9	3	4	.....	11	.....	.....	.....	3	37	8
District of Columbia		180,000	30	96	27.7	16	3	7	4	1	7	.....	.....	5	.....	2	.....	.....	26	6
Va	Norfolk	25,800	10	18	36.4	.....	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	.....	7	2
	Richmond	64,670	11	28	22.7	6	.....	4	1	1	.....	.....	.....	1	.....	.....	.....	1	7	.....
	Lynchburg	16,500	3	7	22.1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C	Wilmington	17,600	4	11	32.7	1	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
S. C	Charleston	57,000	12	27	24.6	2	.....	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ga	Augusta	27,012	.....	17	32.9	1	1	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Atlanta	38,000	4	6	8.1	3	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Rome	5,000	..	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brunswick	2,900	1	3	54.0	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla	Jacksonville	10,000	1	5	26.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala	Mobile	40,000	7	12	15.6	2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....
	Selma	7,505	1	2	13.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss	Columbus	5,230	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Vicksburg	12,500	3	11	20.0	1	.....	1	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....
La	New Orleans	216,359	34	103	24.8	16	.....	10	1	1	17	.....	.....	6	.....	.....	.....	.....	.....	2
	Shreveport	8,033	1	4	26.1	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Baton Rouge	7,250	1	5	36.0	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Tex	Austin	16,000	1	5	16.3	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn	Nashville	43,543	3	16	18.8	4	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3	1
	Clarksville	7,250	.....	2	14.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Murfreesboro'	3,800	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky	Louisville	175,000	13	42	16.5	8	.....	.....	1	3	.....	.....	.....	6	.....	.....	.....	.....	4	.....
Ohio	Cleveland	175,000	.....	45	13.3	6	1	2	7	2	.....	3	.....	.....	.....	.....	.....	.....	.....	1
	Gallipolis	4,500	.....	1	11.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dayton	39,000	2	5	6.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Portsmouth	11,320	2	4	18.4	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind	Indianapolis	75,350	8	18	12.3	4	.....	2	.....	.....	2	.....	.....	1	.....	.....	.....	.....	4	.....
	Richmond	13,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Evansville	30,000	6	12	20.5	1	.....	.....	1	2	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill	Chicago	503,298	78	159	16.5	12	9	10	23	7	3	11	.....	10	.....	2	.....	.....	69	9
	Peoria	34,850	3	13	19.4	.....	1	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Aurora	12,059	1	1	4.3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Jacksonville	15,000	1	2	7.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Elgin	8,770	2	3	17.8	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Moline	8,000	.....	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Wis	Milwaukee	116,000	28	51	23.0	2	1	.....	5	4	1	1	.....	3	.....	.....	.....	.....	14	4
	Beloit	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn	Saint Paul	41,800	5	16	20.0	1	.....	3	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Mich	East Saginaw	19,065	1	7	19.2	2	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Flint	9,000	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lansing	10,000	1	4	20.8	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Iowa	Keokuk	12,125	2	3	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
	Davenport	23,000	3	8	18.2	.....	1	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	3	1
Mo	Saint Louis	333,577	51	130	20.3	13	1	6	.....	6	17	.....	.....	3	.....	2	.....	1	27	8

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 2, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Nebr ....Omaha	31,000	4	10	17.3	1	.....	.....	1	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo .....Boulder	3,030	1	1	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	4	10	20.9	1	.....	1	1	1	.....	.....	.....	.....	.....	1	.....	.....	4	1
Cal .....San Francisco	233,700	24	75	16.7	8	.....	4	.....	1	2	.....	.....	7	1	1	.....	.....	7	3
Sacramento	21,500	2	10	24.3	.....	.....	2	.....	2	.....	.....	.....	3	.....	.....	.....	.....	4	.....
Los Angeles	11,000	.....	1	4.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,775,954	1155	2884	19.3	413	80	239	169	96	109	46	.....	182	2	25	6	28	597	164

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING OCTOBER 2, 1880.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass ....Boston	370,000	5,000	180	4	25.4	41.7
R. I .....Providence	100,862	4,000	32	3	16.5	39.1
Del .....Wilmington	38,000	6,000	9	5	9.9	43.4
Md .....Baltimore	338,384	55,412	97	36	14.9	33.9
District of Columbia	120,000	60,000	54	42	23.4	36.4
Va.....Norfolk	14,500	11,300	7	11	26.2	50.7
Richmond	37,970	26,697	11	17	12.2	33.4
S. C.....Charleston	25,000	32,000	7	20	14.6	32.5
Ga .....Augusta	16,182	10,830	8	9	25.9	42.2
Atlanta	22,000	16,000	4	2	9.5	6.5
Brunswick	1,500	1,400	.....	3	.....	118.7
Ala .....Mobile	28,000	12,000	6	6	11.2	26.2
Selma	3,425	4,080	1	1	15.2	12.7
Fla .....Jacksonville	6,000	4,000	3	2	26.1	26.1
Miss ....Columbus	2,760	2,470	.....	3	.....	60.7
La .....New Orleans	159,128	57,231	71	32	23.2	29.2
Shreveport	3,916	4,117	1	3	13.3	38.3
Tex.....Austin	12,000	4,000	2	3	8.7	39.1
Tenn ....Nashville	27,874	15,669	6	10	10.9	33.0
Clarksville	4,000	3,250	.....	.....	.....	.....
Murfreesboro'	2,000	1,800	.....	1	.....	29.0
Ky .....Louisville	153,125	21,875	32	10	10.9	24.5
Ohio .....Portsmouth	10,320	1,000	4	.....	20.2	.....
Totals	1,496,946	360,131	535	223	18.6	32.3

The following reports, for the week ending October 2, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 4; under 5 years, 3; consumption 1; croup 1. Allegheny, Pa., 78,000; deaths, 12; under 5 years, 3; consumption 1; diphtheria 1; pneumonia 1. Bath, Me., 8,000; deaths, 8; under 5 years, 1; consumption 3; diarrhœa 1; diphtheria 1; old age 3. Belfast, Me., 5,308; one death. Brattleboro', Vt., 6,000; pneumonia 1. Bucyrus, Ohio, 3,950; 1 death, diarrhœa, under 5 years. Carrollton, Miss., 600; no deaths. Cedar Keys, Fla., 600; deaths, 2; consumption 1; malarial fever 1. Chillicothe, Ohio, 11,000; no deaths. Circleville, Ohio, 6,400; deaths, 4; consumption 3; malarial fever 1. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 953; one death, under 5 years. Dallas, Tex., 10,300; deaths, 3; under 5 years, 1; diarrhœa 1; enteric fever 1; malarial fever 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Fernandina, Fla., 3,000; deaths, 2; consumption 1; puerperal 1. Helena, Mont., 3,630; deaths, 2; whooping cough 2, under 5 years. Hernando, Miss., 1,000; one death. Huntingdon, Pa., 4,500; old age 1. Huntingdon, Tenn., 1,200; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 5; puerperal fever 1; old age 1. Kenosha, Wis., 5,500; deaths, 2; diarrhœa 1; pneumonia 1. Lebanon, Pa., 9,000; deaths, 4; under 5 years, 2; consumption 1; enteric fever 1. Louisiana, Mo., 5,200; no deaths. Meridian, Miss., 4,013; deaths, 2. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; no deaths. Monmouth, Ill., 6,000; deaths, 2; under 5 years, 1; consumption 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,412; one death, under 5 years. Muskegon, Mich., 11,300; deaths, 2, under 5 years; enteric fever 1; malarial fever 1. Painesville, Ohio, 5,500; deaths, 2; under 5 years, 1; diarrhœa 1. Pass Christian, Miss., 4,000; deaths, 2; under 5 years, 1; croup 1. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 2; consumption 1. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; deaths, 2; enteric fever 1; malarial fever 1. Port Royal, S. C., 750; no deaths. Raymond, Miss., 500; no deaths. Rock Island, Ill., 12,000; deaths, 3; consumption 1; malarial fever 1; old age 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 2. Summit, Miss., 1,808; malarial fever 1. Tampa, Fla., 740; old age 1. Titusville, Pa., 9,000; croup 1, under 5 years. Tuskaloosa, Ala; 2,000; death, 1, under 5 years. Winchester, Va., 5,000; deaths, 3; under 5 years, 1; consumption 2; pneumonia 1. Winona, Minn., 10,000; deaths, 4; under 5 years, 2; enteric fever 1. Youngstown, Ohio., 15,089; deaths 1; consumption 1. Total population, 313,838; deaths under 5 years, 24; total deaths, 86; annual rate per 1,000, 14.3.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—After August 28, the reports from hospitals in the United States will be published every four weeks in a table giving the totals for that period. Only those hospitals sending reports for the four weeks will be represented in the table.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
German Hospital	New York, N. Y	General	75	75	3	2	..	..	..	..	..	..	5	2	..	..	..	..	..	..	2	3	1	..	7	2	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	76	70	4	77
Emigrant Hospital	Ward's Island, N. Y	do	428	27	5	2	2	8	..	..	..	..	24	11	1	23	1	..	..	1	6	..	2	4	36	37	..	23	1	..	..	1	5	1	1	3	16	6	2	10	..	..	..	..	..	..	..	..	212	135	10	276
Hart's Island Hospital	Hart's Island, N. Y	do	300	224	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47	42	8	221
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	4	1	3
Rochester City Hospital	Rochester, N. Y	do	125	74	1	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	2	71
Saint Mary's Hospital	do	do	320	223	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	1	..	..	..	5	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	21	15	2	227
Saint Barnabas Hospital	Newark, N. J	do	40	23	2	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	7	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	..	25
Saint Michael's Hospital	do	do	140	147	3	3	4	9	..	..	..	..	..	..	..	..	..	..	..	..	4	4	2	2	24	24	..	18	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	83	85	17	135
Germantown Hospital	Germantown, Pa	do	25	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	4	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	14	7	3	20
Jewish Hospital	Philadelphia, Pa	do	40	29	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	14	24	2	16
Saint Mary's Hospital	do	do	80	25	2	3	2	3	..	..	..	..	2	2	1	4	..	..	..	..	4	2	2	7	6	4	..	5	..	..	..	..	2	3	..	1	..	..	..	..	1	2	..	2	..	..	18	18	5	20
Homœopathic Hospital	Pittsburgh, Pa	do	40	19	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	..	2	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	4	..	..	..	..	..	22	15	3	25
Freedmen's Hospital	Washington, D. C	do	300	236	11	..	..	6	..	..	..	..	3	..	..	..	..	..	..	..	1	..	..	..	11	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	6	..	..	..	..	..	81	64	14	245
Providence Hospital	do	do	160	108	7	8	2	18	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	39	17	6	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	108	89	12	112
Georgia Infirmary	Savannah, Ga	do	50	36	4	..	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	..	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	16	5	35
Saint Mary's Hospital	Galveston, Tex	do	300	92	2	3	..	8	..	..	..	..	6	3	..	4	..	..	..	..	..	..	..	..	68	66	..	17	..	..	..	..	5	2	..	3	..	..	..	..	..	..	..	..	..	..	105	108	3	86
Alexian Brothers' Hospital	Chicago, Ill	do	70	67	6	4	..	10	..	..	..	..	2	3	..	1	..	..	..	..	4	2	..	4	10	9	..	3	..	..	..	..	4	4	..	2	..	..	..	..	..	..	..	..	..	..	65	56	8	66
Saint Luke's Hospital	Detroit, Mich	do	25	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2	1	13
Saint Louis Hospital	Saint Louis, Mo	do	250	68	..	5	2	4	..	..	..	..	6	3	..	6	..	..	..	..	..	..	..	..	29	30	..	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	56	63	3	68
German Hospital	San Francisco, Cal	do	150	62	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	4	4	3	..	3	..	..	..	..	2	1	1	1	..	..	..	..	..	..	..	..	..	..	42	30	8	70
Naval Hospital	Chelsea, Mass	do	100	22	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	1	..	21
Do	Brooklyn, N. Y	do	115	29	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35
Do	Washington, D. C	do	50	8	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	6	1	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	6	..	10
Do	Pensacola, Fla	do	19	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Do	Mare Island, Cal	do	77	23	1	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	4
Riverside Hospital	New York, N. Y	Contagious diseases	150	6	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1	4	1	..	4	1	1	..	..	2	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	2	3	14	7	2	11
Municipal Hospital	Philadelphia, Pa	do	..	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44	31	8	16
State Hospital for Women and Children	do	Women and children	18	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	1	9
Children's Hospital	Washington, D. C	Children	72	44	..	..	..	..	..	..	..	..	2	..	1	1	..	..	..	..	..	..	..	..	4	3	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21	19	2	42
Women's Hospital of Illinois	Chicago, Ill	Women and children	19	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	5	1	14
Insane Asylum	Augusta, Me	Insane	400	423	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	7	4	430
New Hampshire Asylum for Insane	Concord, N. H	do	300	290	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	2	288
State Lunatic Hospital	Worcester, Mass	do	650	542	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	17	4	535
Retreat for Insane	Hartford, Conn	do	150	148	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	7	3	143
Hospital for Insane	Middletown, Conn	do	517	516	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	11	2	519
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	..	1292	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39	20	11	1300
Marshall Infirmary	Troy, N. Y	do	200	136	2	..	..	3	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	1	12	14	45	18	13	150
Willard Asylum	Willard, N. Y	do	..	1604	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35	10	3	1625
State Hospital for Insane	Danville, Pa	do	700	423	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	46	2	383
West Pennsylvania Hospital for Insane	Dixmont, Pa	do	500	589	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	5	6	597
Eastern Lunatic Asylum	Williamsburg, Va	do	381	384	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	5	4	333
North Carolina Insane Asylum	Raleigh, N. C	do	270	277	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	1	278
Alabama Insane Asylum	Tuscaloosa, Ala	do	420	407	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	10	3	402
Minnesota Hospital for Insane	Saint Peter, Minn	do	..	670	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	25	1	666
Insane Asylum	Saint Louis, Mo	do	..	344	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	11	1	348
Insane Asylum of California	Stockton, Cal	do	1114	1112	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	5	3	1112

REPORT OF QUARANTINE INSPECTIONS AND OPERATIONS FOR MONTH ENDING SEPTEMBER 30, 1880.

ARRIVED DURING THE MONTH.

Station.	Name of vessel.	Description of vessel.	Name of commander.	Where from.	Days of passage.	Date of arrival.	No. of crew.	No. of passengers.	Cargo.	Bill of health.	Sanitary condition of vessel.	Disposition of vessel, and remarks.
Philadelphia, Pa	Ortolan	Brig	Victor P. Dorp	Havana	11	Sept. 8	9	...	Sugar	Yes	Fair	Detained on account of one of the crew having died of yellow fever at Havana, and two others sick of same disease before sailing from that port.
Norfolk Va	Chateau Renaud	Steamer	Denovy	Martinique	8	Sept. 18	208	....	Ship's stores, &c.	Not clean	do	Detained for observation.
Charleston, S. C	Anna Bell	Schooner		Cape Haytien								Put in in distress; detained 7 days.
Do	Ana	Bark	Riberol	Havana	15		15	...				Put in in distress; detained 20 days.
Pensacola, Fla	Jessie	Schooner	W. T. Mitchell	Aspinwall	16	Sept. 2	7	....	Ballast	Clean	Good	Quarantined; discharged September 13.
Do	Bonnie Dundee	Bark	E. A. Nielson	Bahia	37	Sept. 3	18	...	do	Not clean	do	Quarantined; discharged September 15.
Do	Pegasus	do	W. Black	Rio de Janeiro	49	Sept. 5	22	...	do	do	do	Quarantined; discharged September 16.
Do	Lady Cartier	Ship	John Williams	Jamaica	13	Sept. 7	16	...	do	Clean	do	Do.
Do	Astracana	do	E. Rice	Rio	49	Sept. 9	23	...	do	Not clean	do	Quarantined; discharged September 25.
Do	Tommasseo	Bark	P. Stagno	Cape Town	68	Sept. 13	14	...	do	None	(*)	Quarantined.
Do	Argot	do	J. Johnson	Montevideo	51	Sept. 18	14	...	do	Clean	Good	Do.
Do	Lady Gertrude	do	John Black	Demarara	19	Sept. 20	14	...	do	do	(†)	Quarantined; discharged September 30.
Do	Eviora	Brig	W. A. Whittier	Matanzas	6	Sept. 22	8	...	do	do	(†)	Quarantined; discharged September 25.
Do	Greenock	Ship	A. G. Slater	Rio	47	Sept. 30	20	...	do	None	Good	Quarantined.
Mobile, Ala	Eugenia	Schooner	Ferrer	Frontera Tabasco	10	Sept. 3	6	6	None	Clean	do	Quarantined; discharged September 9.
Do	Oldampt	Bark	Mulder	Vera Cruz	18	Sept. 27	10	....	Ballast	do	do	Quarantined.
Ship Island, Miss	Lenore	do	A. Grondin	Guadeloupe	23	Sept. 4	12	....	Stone	do	do	Detained for observation; discharged September 8.
Do	H. Buddig	Schooner	A. Voss	Havana	7	Sept. 7	7	....	None	do	do	Detained for observation; discharged September 10.
Do	Maria	Bark	Castro Calzada	do	16	Sept. 11	12	....	Stone ballast	do	Fair	Detained for observation; discharged September 18.
Do	Robert Ruff	Schooner	P. Mackeprang	do	7	Sept. 19	7	...	None	do	Good	Fumigated, &c.; discharged September 23.

* Might be improved. † Could be improved.

REMAINING IN QUARANTINE AT DATE OF LAST REPORT.

Station.	Name of vessel.	Description of vessel.	Date when placed in quarantine.	Disposition of vessel, and remarks.
Pensacola	Tommasseo	Bark	September 13	Being fumigated, &c.
Do	Argot	do	September 18	Do.
Do	Greenock	Ship	September 30	Do.
Mobile, Ala	Oldampt	Bark	September 30	Do.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	Sept. 25	2	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
Canada	Kingston	16,000	Oct. 2	2	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56.2
Cuba	Havana	195,437	Sept. 25	138	36.8	.....	.....	.....	15	.....	11	.....	2	.....	.....	.....	.....	82
Hayti	Port au Prince	30,000	Sept. 15	18	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91
Do	....do	30,000	Sept. 22	16	27.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
Do	Aux Cayes	9,000	Sept. 11	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
Do	....do	9,000	Sept. 18	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Aspinwall	Colon	3,000	Sept. 25	4	69.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Mexico	Matamoras	16,000	Sept. 25	11	35.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Helena	Jamestown	6,240	Aug. 14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.5
Do	....do	6,240	Aug. 21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.1
Do	....do	6,240	Aug. 28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.2
Do	....do	6,240	Sept. 4	2	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.5
Do	....do	6,240	Sept. 11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.8
Ireland	Queenstown	10,000	Sept. 25	3	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland	Glasgow	589,598	Sept. 18	185	16.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.6
Do	Dundee	155,100	Sept. 18	44	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.6
Do	Leith	58,479	Sept. 25	26	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	52.7
England	London	3,254,260	Sept. 18	1,438	20.5	.....	.....	.....	.....	.....	3	.....	18	.....	.....	.....	89	55.6
Do	Bristol and Clifton	213,500	Sept. 8	105	25.7	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	4	57.4
Do	Bradford	197,196	Sept. 11	109	28.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Do	....do	197,196	Sept. 18	109	28.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Do	Tunstall	201,442	Sept. 18	139	35.9	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	1	60.4
Do	Hanley	21,349	Sept. 11	81	39.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Liverpool	544,056	Sept. 18	358	34.4	.....	.....	.....	.....	3	.....	6	7	24	2	15	18	56.1
Do	....do	544,056	Sept. 25	343	32.9	.....	.....	.....	.....	.....	.....	7	6	26	2	27	28	56.3
Do	Sheffield	304,938	Sept. 25	150	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.4
Wales	Cardiff	82,364	Sept. 25	37	23.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57.3
France	Paris	1,988,806	Sept. 16	881	23.1	.....	.....	.....	.....	.....	11	.....	38	.....	.....	.....	57	.....
Do	....do	1,988,806	Sept. 23	935	24.6	.....	.....	.....	.....	.....	29	.....	38	.....	.....	.....	65	.....
Do	Rouen	104,902	Sept. 25	51	25.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Zurich	22,103	Sept. 18	13	30.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Amsterdam	316,952	Sept. 18	159	26.2	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	4	62
Do	Rotterdam	150,378	Sept. 25	64	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	18	.....	.....
Germany	Berlin	1,096,644	Sept. 11	709	33.6	.....	.....	.....	.....	.....	.....	60	19	.....	.....	143	61	66
Do	Breslau	276,000	Sept. 11	166	31.3	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	27	63
Do	Brunswick	74,000	Sept. 18	32	22.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Do	Bremen	109,000	Sept. 11	57	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Barmen	95,000	Sept. 18	30	16.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	55
Do	Cologne	141,639	Sept. 18	77	28.3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	9	.....
Do	Frankfort	129,000	Sept. 18	52	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	63
Do	Hamburg	400,000	Sept. 4	276	36.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....
Saxony	Dresden	220,500	Sept. 11	137	32.3	.....	.....	.....	.....	.....	.....	2	2	.....	.....	14	14	64
Do	....do	220,500	Sept. 18	106	25.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	10	59
Do	Chemnitz	92,383	Sept. 11	58	32.8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	69
Do	Leipsic	150,836	Sept. 18	65	22.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	58
Brussels	Belgium	406,638	Sept. 18	196	24.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Denmark	Copenhagen	235,254	Sept. 14	153	34.0	.....	.....	.....	.....	.....	.....	33	2	.....	.....	20	.....	60
Italy	Genoa	185,000	Sept. 18	82	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Austria	Trieste	128,233	Sept. 4	101	41.1	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	.....	.....
Do	....do	128,233	Sept. 11	79	32.1	.....	.....	.....	.....	.....	3	.....	3	.....	.....	.....	.....	.....
Do	Vienna	746,243	Sept. 18	327	20.3	.....	.....	.....	.....	.....	7	.....	1	.....	1	.....	14	59
Roumania	Bucharest	177,646	Sept. 4	100	29.4	.....	.....	.....	.....	.....	.....	.....	5	.....	1	.....	4	.....
Do	....do	177,646	Sept. 11	95	27.9	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
Hungary	Buda-Pesth	344,604	Sept. 4	235	35.5	.....	.....	.....	.....	.....	9	.....	2	.....	.....	.....	1	.....
Do	....do	344,604	Sept. 11	242	36.6	.....	.....	.....	.....	.....	1	.....	10	.....	.....	.....	5	.....
Russian Poland	Warsaw	357,169	Sept. 11	160	23.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	69
Sweden	Stockholm	169,429	Sept. 11	110	55.0	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	18	59
Portugal	Lisbon	225,152	Aug. 28	147	34.1	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	69
Do	....do	225,152	Sept. 4	125	29.0	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	72
Do	....do	225,152	Sept. 11	108	25.0	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	70
Do	Oporto	108,346	Sept. 4	69	33.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	75
Do	....do	108,346	Sept. 11	79	38.0	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	70
Spain	Seville	138,000	Sept. 12	110	41.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	22	82
Do	Cadiz	65,028	Sept. 18	32	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
Barbary	Tripoli	20,000	Sept. 11	6	15.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87.8
Do	....do	20,000	Sept. 18	7	16.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91.4
Cape Colony	Cape Town	35,000	Aug. 30	25	37.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
Do	....do	35,000	Sept. 6	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
Egypt	Alexandria	220,000	Sept. 11	175	41.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	220,000	Sept. 18	209	49.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
India	Calcutta	429,555	Aug. 28	147	17.8	.....	7	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....

National Board of Health

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POSTER, M.D. E. 26TH ST. N.Y.

MONTHLY REVIEW OF MORTALITY FOR SEPTEMBER, 1880.

There is a loss of 278,793 in the mean population represented in the reports for this month, as compared with those for August. The death-rate for the whole country has fallen from 21.56 to 20.41, taking the mean rate for this month and the last; but on comparing the first week of August with the last week of September the reduction is from 22.73 to 19.90. The mean rate of infant mortality, which last month showed a fall of 40 per cent. as compared with that for July, is declining more slowly, the mean for this month being 17 per cent. less than that for August. Taking the extremes for this month and the last, the reduction has been from 10.95 to 8.13, or nearly 26 per cent.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Sept. 4.....	7,573,048	2,984	20.55	1,219	8.39	40.85	546	3.76	18.30	409	2.82	13.71	137	0.94	4.59	121	0.84	4.06	91	0.63	3.05
Sept. 11.....	7,831,255	3,088	20.57	1,343	8.95	43.08	574	3.82	18.59	417	2.78	13.50	157	1.04	5.03	174	1.15	5.63	131	0.87	4.26
Sept. 18.....	8,253,607	3,225	20.39	1,329	8.40	41.21	666	4.21	20.07	468	2.96	14.51	198	1.25	6.14	208	1.32	6.45	150	0.95	4.65
Sept. 25.....	8,243,134	3,181	19.90	1,300	8.13	40.88	629	3.94	19.78	439	2.75	13.80	190	1.19	5.97	237	1.48	7.45	173	1.08	5.44
Totals	31,901,044	12,478	.....	5,191	.....	.....	2,415	.....	.....	1,733	.....	.....	682	.....	.....	740	.....	.....	545	.....	.....
Means	7,975,261	3,119½	20.41	1,297¾	8.49	41.60	603¾	3.95	19.35	433¼	2.83	13.89	170½	1.12	5.47	185	1.21	5.93	136½	0.89	4.37

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Sept. 4.....	30	0.21	1.01	56	0.38	1.88	524	3.61	17.56	77	0.53	2.58	11	0.07	0.37	32	0.22	1.08	107	0.74	3.20	10
Sept. 11.....	43	0.28	1.40	40	0.26	1.25	464	3.09	15.03	75	0.50	2.43	5	0.03	0.16	41	0.27	1.26	96	0.64	3.11	11
Sept. 18.....	58	0.37	1.80	34	0.21	0.99	374	2.36	11.60	110	0.69	3.41	5	0.03	0.15	30	0.19	0.90	98	0.62	3.04	10
Sept. 25.....	64	0.40	2.01	46	0.29	1.45	332	2.08	10.44	81	0.51	2.55	10	0.06	0.31	26	0.16	0.81	98	0.61	3.08	11
Totals	195	.....	.....	176	.....	.....	1,694	.....	.....	343	.....	.....	31	.....	.....	129	.....	.....	399	.....	.....	42
Means	48¾	0.32	1.56	44	0.29	1.41	423½	2.77	13.57	85¾	0.56	2.75	7¾	0.06	0.25	32¼	0.21	1.03	99¾	0.65	3.19	10½

Causes of death.—Consumption and acute lung diseases, having increased about 8 per cent., are now at the head of the list of death-rates, showing a mortality of 3.95, while diarrhœal diseases have fallen to a rate of 2.77. This loss of 43 per cent. since last month is not the greatest change of rate noted in the table. Diphtheria and croup show an advance of 50 per cent. since last month, while malarial fevers have increased their death-rate from 0.42 to 0.65, or 55 per cent. The general movement of six principal zymotic diseases has been as follows: *Increased*—diphtheria from 0.58 to 0.89, or 53 per cent.; enteric fever from 0.49 to 0.56, or 14 per cent.; malarial fevers from 0.42 to 0.65, or 55 per cent. *Decreased*—scarlet fever from 0.34 to 0.29, or 15 per cent.; measles from 0.09 to 0.06; whooping cough from 0.24 to 0.21, or 12 per cent.

One of the most notable changes in this class of diseases is the rapid subsidence of the death-rate from measles, which lately stood high among the causes of death. Scarlet fever is also declining, but the marked increase in diphtheria and enteric and malarial fevers causes the total death-rate from the six diseases noted to be more than 23 per cent. above that for August. Of the 42 deaths from small-pox noted this month, 28 were in Philadelphia, 6 in Camden, N. J., 3 in New York City and Brooklyn, 2 in Chicago, and 3 in San Francisco. For reasons previously given, these reported deaths afford no reliable indication of the extent to which this disease may prevail in any place, but the reports and correspondence show a tendency to increased prevalence of small-pox throughout the country. The statement made in the review for August, that no yellow fever had appeared at any of the exposed points on the coast, must now be modified in view of the acceptance by the National Board of Health of the report of Dr. Geo. M. Sternberg, U. S. A., as published in No. 15 of the BULLETIN. The report declares the fever which has prevailed since August on the Lower Mississippi, but which is now rapidly subsiding, to have been yellow fever of mild type, and causing in most places but a small mortality. No special measures of isolation or quarantine were adopted, but the disease did not spread beyond the districts first infected. The epidemic of *dengue* fever in the South, extending from Louisiana to South Carolina, which is fast disappearing, has affected a large number of people, but caused comparatively few deaths.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast.....	4,587,562	7,409	21.06	1,526	4.34	20.60	1,065	3.02	14.37	461	1.31	6.22	478	1.38	6.45	371	1.05	5.01
Southeast.....	1,431,786	2,204	20.08	474	4.07	21.51	369	3.36	16.74	105	0.95	4.77	95	0.86	4.32	58	0.53	2.64
Northwest.....	1,656,851	2,387	18.79	342	2.69	14.33	234	1.84	9.80	108	0.85	4.52	162	1.27	6.79	118	0.33	4.94

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES—Continued.

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	107	0.30	1.44	88	0.25	1.19	1,133	3.22	15.29	178	0.50	2.40	14	0.04	0.19	66	0.19	0.89	109	0.31	1.47	37
Southeast	37	0.34	1.68	28	0.25	1.27	223	2.03	10.12	75	0.68	3.41	8	0.07	0.36	41	0.37	1.86	186	1.70	8.44	.....
Northwest	44	0.35	1.84	60	0.47	2.51	302	2.63	12.65	84	0.66	3.52	8	0.06	0.34	22	0.17	0.92	93	0.75	3.89	2

Distribution of diseases.—In comparing the death-rate in the three sections of the country it is to be remarked that both consumption and acute lung diseases, while showing in the Northeast and Southeast sections the gradual increase of death-rate to be expected from the change of season, exhibit a considerable decline in the Northwest. At the same time, diphtheria and croup have increased in that section from 0.73 to 1.27, or 74 per cent., having risen 44 per cent. in the Northeast and 48 in the Southeast. Scarlet fever shows but a small reduction in the Northeast and Northwest, but in the Southeast has fallen from 0.47 to 0.25, or 47 per cent. Diarrhœal diseases are declining rapidly in all sections, having fallen since last month 45 per cent. in the Northeast, 34 per cent. in the Southeast, and 50 per cent. in the Northwest. Enteric fever continues to increase in the Northeast and Southeast, having advanced 11 and 17 per cent. in those sections, respectively, but the rate remains stationary in the Northwest. In the latter section whooping cough shows a decline of 40 per cent., while it has been reduced but 7 per cent. in the Southeast, and in the Northeast has the same rate as last month. The general increase in the death-rate from malarial fevers is most evident in the Southeast, where the rate has risen from 0.88 to 1.70, or 93 per cent.; in the Northwest the increase is from 0.48 to 0.75, or 56 per cent.; and in the Northeast the rise is only from 0.27 to 0.31, or 15 per cent. A rapid decline in these fevers is to be expected after the appearance of frost.

SANITARY DECREE FOR THE PHILIPPINE ISLANDS.

The Department of State forwards a note from the Spanish Minister, Señor Félipe Mendez de Vigo, dated September 22, informing the United States Government that the sanitary law of Spain, bearing date of November 28, 1855, is to be enforced in the Philippine Islands. The following decree has accordingly been issued:

MINISTRY OF THE COLONIES.

Decree.

In compliance with the suggestion of the director-general of civil administration, I hereby decree as follows:

1st. The organic sanitary law of the kingdom, dated November 28, 1855, with all modifications which have been subsequently made therein, is declared operative for the time being in these islands.

2d. The sanitary dues established by the said law shall be understood to be increased in the proportion of from a *real sencillo* to a *real fuerte;* but according to article 51, chapter 10, of the same law, the increase shall not be required until the expiration of six months from the date of the publication of this decree.

3d. A board is hereby appointed to prepare special maritime sanitary regulations for this archipelago, said board to be composed of the following persons: Don Antonio Garcia Trimiño, physician attached to the navy; Don Alejandro de Churruca, captain of the port of Manila; Don Emiliano de Olano, ship-owner; Don Juan Antonio Candelas, sub-delegate of medicine and surgery; Don Ramon Ubeda, collector of customs; Don Enrique Gonzalez de Zurbano, commander of the corps of Carabineers; Don Ramon Ninvi, physician attached to the army; Don Francesco Capelo, ex-naval physician, who will perform the duties of secretary. The board will choose its own presiding officer during its first session.

4th. The regulations, which shall be prepared by the board in as concise a form as possible, shall, after having been submitted to the superior board of health and to the council of administration, be laid before the supreme government for its approval.

5th. The director-general of civil administration shall have charge of the enforcement of this decree.

FERNANDO PRIMO DE RIVERA,
Governor-General.

MANILA, *June* 5, 1880.

SHELBYVILLE, TENN.—Dr. C. C. Fite, president of the local board of health, writes, under date of October 11, that no epidemic or contagious diseases have lately prevailed in that vicinity, but there has been an unusual mortality among those affected with chronic diseases.

QUARANTINE NOTICE TO PILOTS AND MASTERS OF VESSELS.

SAPELO QUARANTINE STATION.—Dr. W. H. Elliott, inspector, forwards the following notice, issued by the authorities of Savannah, Ga.:

NOTICE TO PILOTS AND MASTERS OF VESSELS.

Quarantine order.

OFFICE HEALTH OFFICER,
Savannah, October 4, 1880.

On and after October 4, 1880, and until further notice, all coastwise vessels coming to this port from ports or latitudes south of Cape Hatteras, especially Key West, Fla., from all *foreign ports*, and any of the Gulf ports, shall be required to stop and remain at the lower quarantine station, opposite Cockspur Island, until inspected by the quarantine officer at that point, and granted by him a written permit to come up to the city. When considered necessary any or all vessels will be subjected to re-inspection by the health officer upon coming to the city.

Vessels from all ports, with sickness on board, on arrival or during voyage, shall remain at the quarantine station until visited and inspected by the quarantine officer.

Pilots and masters of vessels will be prosecuted to the extent of the law for any violation of this order.

By order of

JOHN F. WHEATON, *Mayor.*
J. T. MCFARLAND, M. D., *Health Officer.*

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

AMSTERDAM, N. Y.—S. H. French reports, under date of October 11, one case of small-pox, said to have been contracted from exposure to contagion in Troy, N. Y.

BURLINGTON, VT.—Dr. George M. Ockford, under date of October 10, states that the mild form of scarlet fever prevailing in the city is increasing among the children attending the public schools. The disease appeared in one school soon after its opening, September 5, and has been confined to the children in attendance. Catarrhal diseases are becoming frequent with the variable weather incident to the change of season.

HAVANA, CUBA.—During the week ending October 8 there were 14 deaths from yellow fever; six among citizens and 8 in military hospitals. About fifty cases are believed to exist in the city at date of writing, October 9.

JEFFERSON, TEX.—Under date of October 16, Dr. A. P. Brown notes that malarial fevers are unusually prevalent in that vicinity, for the season of the year.

TAMPA, FLA.—The Surgeon-General of the Army forwards dispatches from Tampa, dated October 11, stating that a private soldier at Key West named Shute was taken with yellow fever on the 7th and died on the 11th. A girl was taken on the 9th, and her mother, a Mrs. Weaver, the next day. Later advices state that the mother died on the 13th, and the daughter will probably die.

In addition to the cases previously reported from Key West, Fla., by Dr. Porter, U. S. A., a dispatch, dated October 15, states that Private Hayes was taken with the fever on the 14th. The girl Mary Weaver died on the same day.

TUXPAN, MEXICO.—Dr. A. M. Boyd, health officer, reports for the month of August 15 deaths: 3 from malarial fevers, 1 from consumption, 2 from pneumonia, 1 from dysentery, 1 from jaundice, 2 from gastritis, 2 from epilepsy, and 3 from accidents. Annual death-rate, 27.8 per 1,000. No epidemic disease has prevailed during the month. A later communication gives the mortality for September as follows: Total deaths, 20; malarial fevers, 11; consumption, 3; diarrhœa, 1; epilepsy, 1; pneumonia, 1; gastritis, 1; scrofula, 1; accident, 1. Population, 7,186; annual death-rate, 33.3. General sanitary condition very good.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 9, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	34,000	5	12	18.4	2	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bangor	16,780	.....	2	6.1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	4	5	15.8	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Mass .... Boston	375,000	48	149	20.7	33	2	18	11	3	.....	.....	.....	10	.....	2	.....	2	41	4
Cambridge	52,800	7	22	20.0	2	.....	3	1	.....	.....	.....	.....	1	.....	.....	.....	.....	6	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,268	6	12	23.0	.....	.....	3	1	1	.....	1	.....	1	.....	1	.....	.....	8	.....
Newburyport	13,800	2	7	29.0	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	2	5	34.9	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	.....	2	27.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	1	2	14.7	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lowell	59,340	8	23	20.2	5	.....	1	.....	3	.....	1	.....	4	.....	.....	.....	.....	6	.....
Lawrence	39,000	4	10	13.4	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Worcester	58,000	.....	24	21.5	4	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
Lynn	38,400	4	8	10.9	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,598	2	4	15.0	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,640	.....	3	59.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Milford	9,200	1	1	5.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	.....	2	9.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Fitchburg	12,500	6	6	24.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	5	14	29.2	2	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Springfield	33,000	1	10	15.8	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
R. I. ..... Providence	104,862	9	29	14.4	3	.....	3	1	2	.....	1	.....	1	.....	.....	.....	.....	7	3
Conn .... New Haven	63,000	4	18	14.7	1	.....	.....	1	.....	1	.....	.....	2	.....	.....	.....	.....	3	.....
New Britain	14,000	1	5	18.5	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
East Haven	1,201	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,300	1	6	15.4	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	2
Fairfield	3,650	.....	1	14.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,203,823	237	588	25.5	99	23	53	42	6	11	5	.....	70	1	3	.....	5	150	17
Brooklyn	564,448	126	277	25.6	39	17	23	37	3	7	.....	.....	22	1	1	.....	3	93	9
Yonkers	19,000	.....	2	5.6	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Poughkeepsie	21,200	1	2	5.2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Newburg	18,043	3	6	17.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Utica	34,500	3	6	9.2	1	.....	.....	.....	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....
Rochester	90,000	13	42	24.3	7	.....	1	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Buffalo	155,159	13	46	15.1	4	2	3	4	2	4	3	.....	3	.....	.....	.....	.....	20	.....
Little Falls	6,910	.....	2	15.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,009	2	3	25.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansingburg	7,150	.....	3	21.7	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
N. J ..... Hudson County	209,000	23	102	25.0	7	2	2	3	.....	4	.....	.....	4	.....	9	.....	.....	13	36
Newark	138,000	28	57	21.6	8	2	6	5	1	1	.....	.....	3	.....	.....	.....	.....	.....	.....
Orange	13,213	2	6	24.1	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Camden	41,714	5	11	13.8	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	4	.....
Plainfield	8,160	1	4	26.1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	850,000	79	268	16.4	34	5	7	4	13	1	5	.....	11	.....	1	9	3	.....	.....
Pittsburgh	156,649	25	63	20.7	6	1	3	9	5	.....	9	.....	1	1	.....	.....	.....	24	3
Erie	28,568	1	2	3.7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Del ..... Wilmington	44,000	5	11	13.0	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Md ..... Baltimore	393,796	59	135	17.9	21	6	7	6	3	2	12	.....	8	.....	3	.....	6	48	1
District of Columbia	180,000	46	94	27.2	9	5	3	9	4	7	1	.....	7	.....	2	.....	.....	33	3
Va ..... Norfolk	26,200	6	16	23.4	2	.....	3	.....	1	5	.....	.....	.....	.....	.....	.....	.....	9	.....
Richmond	64,670	19	38	30.9	7	.....	3	1	2	1	.....	.....	.....	.....	.....	.....	.....	7	.....
Lynchburg	16,500	3	9	28.4	.....	1	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	6	11	32.7	.....	.....	.....	1	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....
S. C ..... Charleston	57,000	15	36	32.8	7	.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Ga ..... Augusta	27,012	10	13	25.2	.....	.....	2	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....
Atlanta	38,000	7	17	23.0	2	.....	3	1	2	.....	.....	.....	.....	.....	1	.....	1	.....	2
Savannah	33,248	13	27	42.6	2	.....	3	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
Rome	5,000	.....	1	10.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	2	6	31.2	1	.....	1	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....
Ala ..... Mobile	40,000	6	10	13.0	.....	1	1	.....	.....	1	.....	.....	1	.....	.....	.....	1	4	.....
Selma	7,505	1	3	20.9	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Miss .... Natchez	7,000	2	5	36.8	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	2	7	29.3	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	32	107	25.8	15	.....	3	2	.....	9	.....	1	5	.....	1	.....	.....	.....	.....
Shreveport	8,033	2	6	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,250	1	6	43.2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Tex ..... San Antonio	20,597	1	7	17.7	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austin	16,000	1	4	13.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ark ..... Little Rock	22,000	6	9	21.3	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	7	18	21.2	1	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Clarksville	7,250	2	3	21.7	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,800	.....	2	27.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	13	39	11.6	4	.....	3	1	2	3	1	.....	5	.....	.....	.....	.....	13	1
Ohio .... Cincinnati	280,000	30	91	17.0	20	1	7	.....	.....	2	1	.....	8	.....	.....	.....	.....	20	3
Cleveland	175,000	.....	56	16.6	3	6	2	7	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	1
Gallipolis	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	5	12	16.1	2	.....	.....	.....	1	.....	.....	.....	3	.....	.....	.....	.....	2	1
Portsmouth	11,320	1	5	23.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ind ..... Indianapolis	75,350	16	26	17.7	.....	1	1	2	1	.....	2	.....	5	.....	.....	.....	.....	8	3
Richmond	13,000	2	6	24.7	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evansville	30,000	6	10	17.4	.....	1	.....	.....	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,298	80	175	18.1	25	15	16	21	5	1	3	.....	11	.....	2	1	.....	65	6
Peoria	34,580	4	11	16.5	.....	.....	3	1	.....	.....	3	.....	1	.....	.....	.....	1	1	.....
Aurora	12,059	.....	2	8.7	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	1	3	10.5	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	1	1	5.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,000	1	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	116,000	26	47	20.5	5	1	3	3	1	.....	3	.....	1	.....	.....	.....	.....	15	2
Beloit	5,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn .... Saint Paul	41,800	5	15	18.8	2	.....	.....	1	3	.....	1	.....	3	.....	.....	.....	.....	.....	.....
Mich ... East Saginaw	19,065	2	6	16.5	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansing	10,000	.....	3	15.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 9, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Iowa ....Keokuk	12,125	.....	1	4.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Davenport	23,000	3	7	15.9	1	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	3	.....
Mo .....Saint Louis	333,577	37	118	18.5	23	1	8	4	3	7	.....	.....	6	.....	.....	.....	.....	29	6
Nebr ....Omaha	31,000	.....	3	5.2	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo .....Boulder	3,030	1	1	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	3	6	12.5	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Cal .....San Francisco	233,700	18	75	16.7	16	.....	3	.....	3	.....	1	.....	9	.....	.....	.....	.....	12	.....
Sacramento	21,500	1	10	24.3	.....	.....	.....	.....	.....	1	.....	.....	2	.....	.....	.....	.....	1	.....
Los Angeles	11,000	3	5	23.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	3	22.1	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Totals	8,241,313	1,197	3,213	20.2	456	97	235	194	81	89	59	1	223	3	35	12	23	664	111

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING OCTOBER 9, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	145	4	20.4	41.7
R. I .....Providence	100,862	4,000	29	.....	15.0	.....
Del .....Wilmington	38,000	6,000	11	.....	13.0	.....
Md .....Baltimore	338,384	55,412	113	22	17.4	20.7
District of Columbia	120,000	60,000	55	39	23.9	33.8
Va.....Norfolk	14,900	11,300	11	5	39.1	23.1
Richmond	37,971	26,699	17	21	18.9	41.2
S. C.....Charleston	25,000	32,000	8	28	16.6	45.5
Ga.....Savannah	18,229	15,019	8	19	22.8	65.8
Augusta	16,182	10,380	2	11	6.5	51.5
Atlanta	22,000	16,000	7	10	16.6	32.7
Ala .....Mobile	28,000	12,000	4	6	7.5	26.1
Selma	3,425	4,080	1	2	15.2	25.6
Fla .....Jacksonville	6,000	4,000	1	5	8.7	65.2
Miss .....Natchez	3,500	3,500	.....	5	.....	75.5
La .....New Orleans	159,128	57,231	65	42	21.3	38.3
Shreveport	3,916	4,117	3	3	40.0	38.3
Baton Rouge	2,954	4,233	3	3	53.0	37.0
Tenn ....Nashville	27,874	15,669	9	9	16.4	29.7
Clarksville	4,000	3,250	1	2	13.0	32.1
Murfreesboro'	2,000	1,800	1	1	26.1	29.0
Ky .....Louisville	153,125	21,875	31	8	10.6	19.6
Tex.....Austin	12,500	4,000	4	.....	17.4	.....
Ohio .....Portsmouth	10,320	1,000	4	1	20.2	52.2
Iowa.....Keokuk	11,165	960	1	.....	4.7	.....
Totals	1,528,935	379,525	534	246	18.2	33.8

The following reports, for the week ending October 9, are from places which do not require burial permits:

Alexandria, Va., 13,000; deaths, 13; under 5 years, 4; diarrhœa 1; diptheria 1; enteric fever 2; malarial fever 1. Allegheny, Pa., 78,000; deaths, 12; under 5 years, 5; consumption 4; croup 1; diphtheria 1; enteric fever 1. Bath, Me., 8,000; deaths, 4; consumption 1; diphtheria 1; enteric fever 1; lung disease 1. Belfast, Me., 5,308; deaths 3; consumption 2. Brattleboro', Vt., 6,000; death, 1; under 5 years, 1; diphtheria 1. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years, 1; consumption 1; diarrhœa 1. Calais, Me., 6,162; deaths, 2; under 5 years, 1; lung disease 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 5; consumption 2. Circleville, Ohio, 6,400; no deaths. Columbus, Miss., 5,230; death, 1; under 5 years, 1; malarial fever 1. Corinth, Miss., 2,264; deaths, 2; under 5 years, 1. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,300; deaths, 2; consumption 1; puerperal 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 360; no deaths. Fernandina, Fla., 3,000; deaths, 2. Helena, Mont., 3,630; death, 1; under 5 years, 1; whooping cough, 1. Hernando, Miss., 1,000; no deaths. Hersey, Mich., 500; death, 1; diphtheria 1. Huntingdon, Pa., 4,500; deaths, 2; under 5 years, 1. Huntingdon, Tenn., 1,200; death, 1; under 5 years, 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; death, 1; under 5 years, 1; diarrhœa 1. Kenosha, Wis., 5,500; death, 1; under 5 years, 1. Lebanon, Pa., 9,000; deaths, 2; under 5 years, 1; consumption 1; croup 1. Louisiana, Mo., 5,200; deaths, 3; under 5 years, 1; enteric fever 1; lung disease 1; accident 1. Martinsburg, W. Va., 6,384; deaths, 3; under 5 years, 1; enteric fever 1. Massillon, Ohio, 6,876; death, 1; consumption 1. Meridian, Miss., 4,013; deaths, 2. Milan, Tenn., 1,800; death, —. Milledgeville, Ga., 3,000; no deaths. Montgomery, Ala., 17,000; deaths, 9; under 5 years, 2; consumption 1; diarrhœa 1; accident 1. Morton, Miss., 250; no deaths. Mount Pleasant, Iowa, 4,500; death, 1; consumption 1. Muscatine, Iowa, 8,412; no deaths. Niles, Mich., 4,200; no deaths. Okolona, Miss., 2,000; no deaths. Painesville, Ohio, 5,504; deaths, 3; enteric fever 1; puerperal 1; accident 1. Pass Christian, Miss., 2,500; deaths, 2; malarial fever 1. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 2. Pleasant Hill, Miss., 253; death, 1; diarrhœa 1. Port Gibson, Miss., 1,200; deaths, 2. Port Royal, S. C., 750; no deaths. Raymond, Miss., 300; no deaths. Rensselaer, Ind., 901; no death. Ripley, Miss., 1,000; deaths, 2; consumption 1; diarrhœa 1. Rock Island, Ill., 12,000; deaths, 7; under 5 years, 4; diarrhœa 2; lung diseases 2. Rockland, Me., 7,500; deaths, 2; consumption 1; diphtheria 1. Santa Cruz, Cal., 5,000; no deaths. Shelbyville, Tenn., 1,913; death, 1; lung disease 1; Springfield, Ohio, 21,000; deaths, 11; under 4 years, diarrhœa 2; enteric fever 1; malarial fever 2. Starkville, Miss., 1,454; death, 1. Steubenville, Ohio, 13,500; deaths, 4. Summit, Miss., 1,808; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; death, 1. Winchester, Va., 5,000; death, 1; lung disease 1. Winona, Minn., 10,000; death, 1; enteric fever 1. Youngstown, Ohio, 15,089; deaths, 4; under 5 years, 3; consumption 1; diarrhœa 2. Total population, 376,654; deaths under 5 years, 37; total number of deaths, 122; annual rate per 1,000, 16.9.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FOUR WEEKS ENDING SEPTEMBER 4, 11, 18, AND 25, FROM THE FOLLOWING PLACES.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	6.5	17.6
Concord, N. H	7.4	18.5
Burlington, Vt	9.5	14.2
Boston, Mass	11.9	24.4
Cambridge, Mass	5.9	16.1
New Bedford, Mass	7.1	21.0
Edgartown, Mass	.....	40.3
Newburyport, Mass	12.0	22.2
Marblehead, Mass	7.0	24.4
Plymouth, Mass	7.3	25.7
Lawrence, Mass	8.3	18.4
Lowell, Mass	16.4	27.6
Worcester, Mass	9.6	22.6
Lynn, Mass	8.2	22.4
Brockton, Mass	9.3	14.9
Bridgewater, Mass	4.9	19.7
Chicopee, Mass	4.8	7.2
Fitchburgh, Mass	11.3	19.6
Somerville, Mass	11.0	18.8
Springfield, Mass	5.9	17.0
Providence, R. I	7.1	16.5
New Haven, Conn	4.5	15.7
Waterbury, Conn	12.8	21.2
New York, N. Y	11.1	23.7
Brooklyn, N. Y	12.0	23.0
Yonkers, N. Y	8.2	18.5
Newburgh, N. Y	6.5	17.4
Cambridge, N. Y	.....	14.5
Seneca Falls, N. Y	6.5	21.7
Port Jarvis, N. Y	1.3	7.8
Hudson County, N. J	8.8	20.4
Camden, N. J	9.1	17.5
Orange, N. J	11.0	19.0
Plainfield, N. J	9.8	19.6
Philadelphia, Pa	5.6	20.4
Pittsburgh, Pa	9.0	18.5
Erie, Pa	6.9	14.3
Baltimore, Md	7.9	19.8
District of Columbia	10.1	23.9
Norfolk, Va	11.6	26.2
Lynchburg, Va	6.3	14.2
Wilmington, N. C	10.4	23.0
Charleston, S. C	8.9	26.2
Augusta, Ga	11.1	21.8
Atlanta, Ga	6.4	18.6
Savannah, Ga	20.1	39.4
Jacksonville, Fla	14.3	26.1
Mobile, Ala	8.1	23.7
Selma, Ala	22.5	29.5
Natchez, Miss	5.5	25.9
New Orleans, La	8.3	25.5
Morgan City, La	6.4	25.8
Baton Rouge, La	16.1	26.9
San Antonio, Tex	7.6	20.8
Nashville, Tenn	6.2	19.1
Clarksville, Tenn	3.6	14.4
Murfreesborough, Tenn	13.8	20.7
Cincinnati, Ohio	6.9	16.1
Gallipolis, Ohio	8.7	14.5
Dayton, Ohio	7.7	18.0
Portsmouth, Ohio	8.0	19.5
Indianapolis, Ind	7.2	16.9
Richmond, Ind	11.3	25.7
Evansville, Ind	9.5	20.9
Moline, Ill	4.9	11.4
Peoria, Ill	5.2	13.8
Aurora, Ill	2.2	13.2
Elgin, Ill	7.4	16.3
Milwaukee, Wis	11.7	20.5
Saint Paul, Minn	9.4	16.9
East Saginaw, Mich	6.9	14.4
Keokuk, Iowa	2.2	8.4
Saint Louis, Mo	7.1	20.0
Lawrence, Kans	10.0	21.0
Omaha, Nebr	5.2	12.1
Salt Lake City, Utah	8.8	15.6
San Francisco, Cal	6.6	18.4
Sacramento, Cal	1.2	12.1
Los Angeles, Cal	10.8	22.7
Vallejo, Cal	.....	5.4

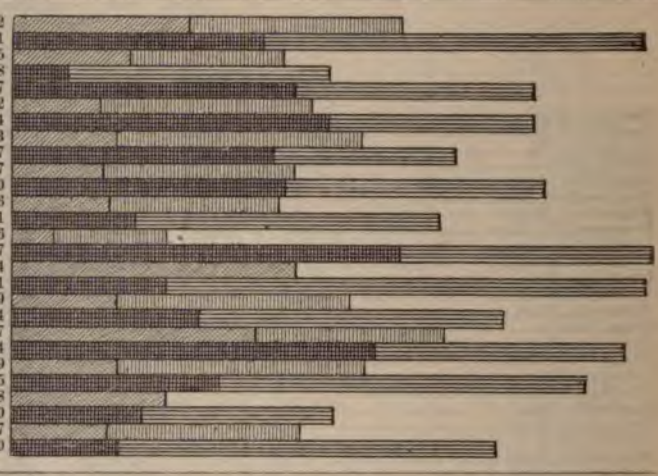
DIAGRAM EXHIBITING THE SAME FOR THE MONTH OF SEPTEMBER, 1880, FOR THE FOLLOWING PLACES.

Amsterdam, N. Y	7.7	18.1
Kingston, N. Y	4.7	6.7
Rochester, N. Y	7.1	15.5
Scranton, Pa	5.4	13.8
Petersburg, Va	17.5	39.3
Wheeling, W. Va	5.2	14.6
Chicago, Ill	10.6	19.1
Watertown, Wis	6.0	10.8

DIAGRAM EXHIBITING THE PROPORTION OF DEATHS PER 1,000 PER ANNUM, BY COLOR, AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH, FOR THE FOUR WEEKS ENDING SEPTEMBER 4, 11, 18, AND 25, 1880, FROM THE FOLLOWING PLACES.

White under 5. White over 5. Colored under 5. Colored over 5.

Boston, Mass	White under 5	11.9	Total white	24.2
Do	Colored under 5	15.6	Total colored	39.1
Providence, R. I	White under 5	7.2	Total white	16.5
Do	Colored under 5	3.2	Total colored	19.8
Baltimore, Md	Total white	17.7	Total colored	32.7
District of Columbia	White under 5	5.5	Total white	18.2
Do	Colored under 5	19.5	Total colored	32.4
Norfolk, Va	White under 5	6.6	Total white	21.3
Do	Colored under 5	16.0	Total colored	27.7
Charleston, S. C	White under 5	5.7	Total white	17.7
Do	Colored under 5	16.7	Total colored	33.0
Atlanta, Ga	White under 5	5.9	Total white	13.6
Do	Colored under 5	7.3	Total colored	26.1
Augusta, Ga	White under 5	2.4	Total white	9.6
Do	Colored under 5	24.1	Total colored	39.7
Jacksonville, Fla	White under 5	17.4	Total white	17.4
Do	Colored under 5	9.8	Total colored	39.1
Mobile, Ala	White under 5	6.4	Total white	20.9
Do	Colored under 5	11.9	Total colored	30.4
Selma, Ala	White under 5	15.2	Total white	26.7
Do	Colored under 5	22.4	Total colored	38.4
New Orleans, La	White under 5	6.6	Total white	21.9
Do	Colored under 5	13.0	Total colored	35.5
Clarksville, Tenn	White under 5	0.0	Total white	9.8
Do	Colored under 5	8.1	Total colored	20.0
Nashville, Tenn	White under 5	6.1	Total white	17.7
Do	Colored under 5	6.7	Total colored	30.0



ABSTRACTS FROM CONSULAR REPORTS.

ACAPULCO, MEXICO.—United States Consul L. H. Foote reports for the month of July 357 deaths, in a population of 101,100, being at an annual rate of 42.4 per 1,000. The following causes of death are noted: lung diseases, 69; fevers, 62; small pox, 11; phthisis, 57.

BORDEAUX, FRANCE.—United States Consul L. A. Price reports for the month of July 19 deaths from small-pox, 11 from typhoid fever, and 26 from other contagious diseases. The deaths from all causes were 555, being at an annual rate of 30 per 1,000, in a population of 215,140. No contagious disease has been epidemic.

GHENT, BELGIUM.—The report of United States Consul S. Spackman for the month of August gives 1 death from cholera, 2 from small-pox, 13 from typhoid fever, and 5 from other contagious diseases. The total number of deaths was 405, and the population being 130,670, the annual death-rate was 37.2 per 1,000. Among other causes of death were: Diarrheal diseases, 217; consumption, 33; and other lung diseases, 10. The high death-rate is chiefly due to diarrhœal diseases among children.

HOBART TOWN, TASMANIA.—United States Consul A. G. Webster reports for the month of June a total of 56 deaths, of which 2 were from typhoid fever, and 7 from other contagious diseases. The population being 27,500, the annual death-rate was 24.4 per 1,000. Of the 56 decedents, 27 were over 60 years of age; this large ratio of aged persons is due to the collection at Hobart Town of hospitals, asylums, and other institutions for the reception of the aged and sick from one-half of the colony. The city is admirably situated on a large tidal river; yet the drainage is still defective, and the health officer has to contend with such evils as cess-pools and a bad system of privies.

MAZATLAN, MEXICO.—United States Consul E. G. Kelton reports 93 deaths for the month of July. Population 14,000, giving an annual death rate of 79.7 per 1,000, yet the sanitary condition is rated as "fair." Among the causes of death were: diarrhœa, 10; fever, 18; and tetanus, 12. Mean temperature, 82°. The recent rains had caused many pools of stagnant water in the lower part of the town, which has only surface drainage.

In August there were 67 deaths, giving an annual rate of 57.4 per 1,000. Diarrhœa caused 7 deaths, fever 15, and tetanus 15. Mean temperature, 84°.

MELBOURNE, AUSTRALIA.—United States Consul O. M. Spencer forwards a report for the month of July, showing 465 deaths in a population of 265,000, and an annual death-rate of 21 per 1,000. There were 11 deaths from typhoid fever, and 20 from other contagious diseases. Mean temperature, 47°.

MONTEVIDEO, URUGUAY.—United States Consul A. L. Russell reports for the month of June 234 deaths, of which 5 were from typhoid fever and 2 from other contagious diseases. The population being 111,500, the annual death rate was 25.2 per 1,000. Mean temperatur, e55°.5.

The report for July gives a total of 246 deaths, being at the annual rate of 26.5 per 1,000. Only 3 deaths are noted from contagious diseases, two of which were from typhoid fever. Mean temperature, 51°.

SAMOA.—United States Consul Thomas M. Dawson writes from Apia, Samoa, under date of August 28, that only monthly reports can be furnished from that place. No record of deaths is kept among the natives, nor can they be estimated by foreigners, as no public demonstration of any kind attends the interment of the deceased. In Hawaii there is always much display on such occasions. The contagious diseases named on the form of consular report of the National Board of Health are mostly unknown in these islands. The missionaries have vaccinated most of the people, but the consul has never heard of a case of small-pox among them. Dysentery is chiefly troublesome to foreigners; the natives suffer from an "influenza" in summer, from insufficient clothing and exposure to changes of temperature in their open huts. The most serious disease of the country is the *fée fée*, or *elephantiasis* (leprosy), which is common among the natives, and also attacks foreigners. The disease begins with enlargement of the legs, testicles, or arms, and beginning in childhood may not prove fatal till old age. In some cases the enlargement is attended with dropsical effusion; in others it seems quite solid. In adults the disease generally begins with chill and fever. Rev. George W. Turner, M. D., eleven years a missionary at Samoa, has in that time operated on 140 cases of *elephantiasis* affecting the testicles. In some cases both of the glands were saved; in others one or both were removed, the latter cases being those where the enlargement was solid. In one instance the organs and parts removed weighed 90 pounds. The disease does not generally interfere with the daily avocations of the patient, unless he is disabled by extensive ulceration, or the occasional attacks of chill and fever which are observed in leprosy. Foreigners may sometimes remain in the islands for many years without being affected, but most of them are attacked within a few months after their arrival. Consumption is not rare, and usually assumes a very rapid form. Venereal diseases are found, but are not prevalent in their worst degrees.

SANTANDER, SPAIN.—The report from this province of 235,300 inhabitants gives a total of 500 deaths for the month of July, being at the annual rate of only 12.5 per 1,000. The births during the same period were 526. Of the decedents 195 were under 5 years and 135 over 60 years of age. Among the causes of death were: Small-pox, 5; diphtheria and croup, 29; whooping cough, 4; enteric fever, 8; typhus fever, 9; dysentery, 9; puerperal fever, 3; scarlet fever and measles, 11. There were 47 deaths from consumption and 31 from acute lung diseases, while 63 were due to diarrhœal diseases, of which one-third were under 5 years.

SINGAPORE.—United States Consul A. G. Studer reports, under date of September 6, that his district continues free from infectious or contagious diseases.

VERA CRUZ, MEXICO.—United States Consul S. T. Trowbridge reports for the month of September 90 deaths, of which 10 were from yellow fever; no other contagious disease noted. Annual death rate, 54 per 1,000. The mortality from yellow fever and some other diseases was among soldiers from the interior, and there is no fear of an epidemic among the citizens. Mean temperature, 88°.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Oct. 3	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
Canada	Montreal	135,000	Oct. 2	68	26.3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	52.6
Do	Kingston	15,000	Oct. 9	1	3.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.8
Bahamas	Nassau, N. P	13,000	Sept. 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
Cuba	Havana	195,437	Oct. 2	138	36.8	.....	.....	.....	16	.....	6	.....	.....	.....	.....	.....	.....	82
Aspinwall	Colon	2,500	Oct. 2	5	103.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Mexico	Matamoras	16,000	Oct. 2	15	48.9	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	11	.....
Teneriffe	Santa Cruz	16,610	Sept. 4	8	25.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	77
Do	....do	16,610	Sept. 11	8	25.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	....do	16,610	Sept. 18	10	31.4	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	78
Brazil	Rio de Janeiro	330,000	Sept. 4	173	27.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....
Do	....do	330,000	Sept. 11	142	22.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	.....
Do	....do	330,000	Sept. 23	163	25.8	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	6	.....
Ireland	Belfast	23,000	Sept. 25	85	24.3	.....	.....	.....	.....	3	.....	1	.....	.....	.....	.....	.....	55.5
Do	Dublin	314,666	Sept. 25	222	38.3	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	27	55.8
Do	Queenstown	10,000	Oct. 2	7	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	23,000	Oct. 2	110	31.4	.....	.....	.....	.....	.....	.....	13	3	.....	2	.....	.....	53.6
Do	Dublin	314,666	Oct. 2	217	35.9	.....	.....	.....	.....	.....	1	.....	9	.....	.....	.....	19	54.1
Scotland	Dundee	155,100	Sept. 25	54	18.2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	18	.....	53.4
Do	Glasgow	589,598	Sept. 25	177	15.6	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	13	53.0
Do	Leith	58,479	Oct. 2	24	23.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	55.6
England	London	3,254,260	Sept. 25	1,441	20.5	.....	.....	.....	.....	.....	5	.....	15	.....	1	.....	95	56.4
Do	Newcastle	148,000	Sept. 25	80	27.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	56.0
Do	Tunstall	170,593	Sept. 25	95	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	59.2
Do	Bradford	197,196	Sept. 25	100	26.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Do	Liverpool	544,056	Oct. 2	294	28.2	.....	.....	.....	.....	.....	1	5	4	17	3	29	27	56.0
Do	Sheffield	304,938	Oct. 2	106	18.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56.2
Wales	Cardiff	82,364	Oct. 2	30	18.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	57.2
France	Paris	1,988,806	Sept. 23	935	24.6	.....	.....	.....	.....	.....	29	.....	38	.....	.....	.....	65	.....
Do	Rouen	104,902	Oct. 2	41	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Lyons	342,815	Sept. 18	157	23.9	.....	.....	.....	.....	.....	4	.....	16	.....	.....	.....	9	.....
Switzerland	Geneva	52,077	Sept. 4	13	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	52,077	Sept. 11	14	14.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Do	....do	52,077	Sept. 18	9	9.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	....do	52,077	Sept. 25	12	12.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Zurich	22,103	Sept. 25	6	14.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Amsterdam	316,952	Sept. 25	175	28.8	.....	.....	.....	.....	.....	.....	.....	7	.....	3	.....	5	58
Do	Rotterdam	150,378	Oct. 2	58	20.1	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	22	.....	.....
Germany	Berlin	1,096,644	Sept. 18	701	33.2	.....	.....	.....	.....	.....	.....	87	12	.....	.....	128	87	61
Do	Frankfort	130,000	Sept. 18	52	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55
Do	....do	130,000	Sept. 25	40	16.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	63
Do	Breslau	276,000	Sept. 18	139	36.2	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	33	58
Do	Mannheim	50,500	Sept. 25	23	23.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
Do	Hamburg	400,000	Sept. 11	231	30.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Do	Brunswick	74,000	Sept. 25	44	31.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	8	.....
Do	Cologne	141,639	Sept. 25	82	30.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....
Do	Bremen	109,000	Sept. 18	44	21.1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Do	Barmen	95,000	Sept. 25	38	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Saxony	Leipsic	150,836	Sept. 25	72	24.8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	52
Do	Chemnitz	92,383	Sept. 18	64	36.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	62
Belgium	Brussels	406,638	Sept. 25	179	23.6	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	2	.....
Denmark	Copenhagen	235,254	Sept. 21	10	24.4	.....	.....	.....	.....	.....	.....	36	2	.....	.....	17	.....	55
Italy	Genoa	185,000	Sept. 25	96	27.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
Do	....do	185,000	Oct. 2	89	25.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Do	Rome	305,161	July 17	200	34.2	.....	.....	.....	.....	.....	5	.....	.....	.....	5	.....	40	87
Do	....do	305,161	July 24	224	38.3	.....	.....	.....	.....	.....	12	.....	4	.....	.....	.....	46	84
Austria	Vienna	746,243	Sept. 25	305	19.2	.....	.....	.....	.....	.....	11	.....	8	.....	.....	.....	15	55
Do	Trieste	128,235	Sept. 18	75	30.5	.....	.....	.....	.....	.....	3	.....	1	.....	2	.....	.....	.....
Roumania	Bucharest	177,646	Sept. 18	96	28.2	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	4	.....
Do	....do	177,646	Sept. 25	82	24.1	.....	.....	.....	.....	.....	3	.....	8	.....	1	.....	3	.....
Hungary	Buda-Pesth	344,604	Sept. 18	217	32.8	.....	.....	.....	.....	.....	4	.....	5	.....	.....	.....	6	.....
Russian Poland	Warsaw	357,169	Sept. 18	213	31.1	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	62
Norway	Christiana	116,801	Sept. 18	45	20.0	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	7	5	57
Barbary	Tripoli	20,000	Sept. 25	13	33.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86.2
Cape Colony	Cape Town	35,000	Sept. 13	30	44.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Egypt	Alexandria	220,000	Sept. 25	191	45.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seychelles Islands	Mahé	12,000	Aug. 21	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Aug. 28	3	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Sept 4	4	17.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Sept. 11	3	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
India	Calcutta	429,535	Sept. 4	185	22.4	.....	4	.....	.....	.....	1	.....	12	.....	2	.....	1	80.8
China	Shanghae	2,197	Aug. 31	3	78.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.4
Japan	Kobe	18,282	Sept. 4	13	37.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,282	Sept. 11	18	51.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

National Board of Health

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FOSTER, M.D. 3 E. 28th ST. N.Y.

REPORT ON YELLOW FEVER AT KEY WEST, FLORIDA.

Dr. S. D. Kennedy, having been directed to investigate the epidemic of yellow fever at Key West, submits the following report, under date of October 19:

Key West is an island about seven miles long, having an average width of one mile and a half and an elevation of twelve feet above the sea-level. The city of the same name is situated at the west end of the island and has a population of about 14,000. It is unpaved and but imperfectly drained by sewers, or rather ditches. These are, with few exceptions, uncovered. Owing to the fact that the soil in which they are dug is very porous, and there being but little movement in them, their fluid contents are rapidly absorbed, a very small proportion being carried away from the city except in very hard rains. Thus, while this system is successful in keeping the city dry, it fails in other and more important points. There is always a large amount of decomposing organic matter scattered about the city, and, as far I as have been able to learn, it depends for its removal on the system of drainage mentioned above. Although the city has a "health office," and burial permits are required, no vital statistics are taken, nor are records of any kind kept. It is claimed that the public health was excellent up to the middle of July last, when a pernicious form of fever made its appearance. July 9, the schooner *Competitor* arrived at Key West, five days from Rock Sound, Bahamas. Among her passengers was a Mrs. Adongia Bastiom, who had lately lost three children with "fever." She does not know what kind of fever this was, but says her children vomited a dark fluid and turned very yellow before dying. She brought with her, as part of her baggage, mattresses, bedding, &c., but said that she had "smoked" everything used by her sick children. She now claims to have destroyed these things; but this contradiction is most probably due to a desire to escape blame. On her arrival Mrs. B. took up her residence at the house of her brother, William Carey, who lives on Grinnell street, near Eaton. On July 16th, a week after her arrival, Fletcher Brady, living on the same lot with Mrs. B., was taken ill. He was very intimate with the Careys and was frequently in their house. He was attended by Dr. Harris, who, although he kept no record of the case, gives me the following information: He found Brady with "high fever," and complaining of violent pain in his head and back; pulse rapid and bounding; his tongue was furred, and there was marked injection of the conjunctivæ. Later his tongue became dirty in the center and very red at the end. On the third day he vomited a light slimy fluid tinged with bile. Dr. H. did not test the urine, nor did he keep a record of temperature, but says that it continued to rise for two days and then gradually fell, being normal on the fifth day. Highest temperature about 104° F., on second day. Brady recovered. He had never had yellow fever. The diagnosis made was "congestive fever." A large number of similar cases followed this one, but no records were kept. Dr. H. gives me, also, the following information: "On September 5, Mary W. was taken sick with high fever, and pain in head and back. On third day of her illness she passed a bloody stool; delirious on fourth day; died September 10, having vomited a dark-colored fluid. After death, bled from mouth and nose. Diagnosis, 'congestive fever.'" No record of temperature. On September 9, daughter of Mr. W. died with "black vomit." Diagnosis in this case also was "congestive fever." On September 9, son of Mr. J. died of "congestive fever." Also, later on, in September, Mrs M. died; according to Dr. Sweating, having vomited genuine "black vomit."

There had been about one hundred and fifty cases similar to the above, all in the same neighborhood, when the following case occurred in the practice of Dr. Perry, health officer of Key West: George McClintock, age about 35 years, was taken ill September 27, at about 2 p. m. Temperature 101°; pulse "rapid"; complained of pain in head and back, and his eyes were slightly congested. The next morning Dr. Perry found him apparently well, and did not take his temperature. On September 29, McClintock rose from his bed and went into an out-house; was detained there about twenty minutes by rain, but did not get wet. At 3 p. m., on the same day, Dr. Perry found his temperature 103.5° and his pulse very rapid. His face was livid and his eyes bloodshot. On the morning of September 30 his temperature was 105.5°, and his pulse slower and weaker than the day previous. On October 1 his temperature began falling, and was normal on the morning of the 2d. He was then very much jaundiced, and vomited genuine "black vomit" at 2 p. m. Died October 3. Urine not tested. This case was diagnosed yellow fever, being the first acknowledged case this summer.

The next case occurred in the practice of Dr. Otto, at the United States barracks. Dr. O. gives the following information: Ordnance Sergeant Weaver, aged about 34, nativity unknown; had been in Key West three weeks; usually temperate, but was intoxicated October 3; taken ill October 4, early in the morning; was seen by Dr. O. at 2 o'clock p. m.; he had had a slight chill and complained of severe pain in head and back, especially over the kidneys; tongue coated; eyes very much congested; temperature 105°; pulse 130; vomited a large amount of greenish-yellow slimy fluid; urine scanty; the usual test for albumen (heat and nitric acid) showed the presence of a large amount. October 5, 2 p. m.: temperature 102.5°; pulse 110; nausea and vomiting continue; urine contains large amount of albumen. October 6, morning: temperature 98.6°; pulse 62; eyes and skin very yellow; black vomit at 9 o'clock p. m.; died October 7, at 8 a. m. On October 4, the youngest daughter of Sergeant W. was taken ill; had fever for several days and recovered; no notes were taken in her case. On the 7th Private Schute was taken ill; no notes were taken, but Dr. O. claims that he presented all the symptoms of yellow fever, including black vomit; Schute died October 11; urine not tested. On October 9, May W., another daughter of Sergeant W., was taken ill. The attack was initiated by a chill and pains in head and back. She was seen shortly afterwards by Dr. O., who gives her history up to my arrival, October 13. He says he found her with a temperature of 103°; pulse rapid; face suffused; eyes bloodshot and tongue coated. Her temperature remained 103° until October 12, when it began to decline. She complained of nausea, and soon vomited a viscid light-colored fluid, and later in the day (October 12) black vomit. On October 13 I saw the child myself, and found her temperature 101.5°; pulse 70; skin yellow and bathed in perspiration; tongue slightly coated, with fevery tip and edges. Her gums were spongy and bled on my scraping them with my finger nail, a small amount of epithelium coming away at the same time. Her gown and the bed linen were stained brown in many places, the stains exactly resembling those of black vomit. On inquiry I found that these stains were caused by matter vomited that morning. Dr. O. did not test the urine, and I was unable to obtain a specimen, the child dying a few hours later. On October 10 the wife of Sergeant Weaver was taken ill. Dr. O. gives me notes up to October 13. He saw her a few hours after the initial chill, and found her temperature 104°; pulse 130; tongue rather red; gums normal. She complained of headache and pain in the "small of her back." He did not keep a record of her temperature, but says it commenced to decline on the second and was normal on the third day. On October 13 I found her in the following condition: temperature 98°; pulse 30, and very weak. Skin very yellow and covered with a sour-smelling sweat. Her face was livid, and her eyes jaundiced, staring, and glassy; tongue narrow, thick, and pointed, with dark coating in patches near the base, and very red elsewhere; gums soft and spongy. At short intervals she ejected small quantities of black vomit. Dr. O. says that she commenced this vomiting the day before. I was unable to obtain a specimen of her urine, as she died about four hours after I saw her, without having passed any.

On October 13, Lizzie Carey (age 15 years, native of Key West) was taken ill with a severe chill. I saw her half an hour later; she then complained of headache and severe lumbar pains. Skin hot and dry; face flushed and eyes congested; tongue slightly coated, and where not coated very red; temperature 102.5°; pulse 118; urine abundant, light in color, and free of albumen, specific gravity 1004. At 4 o'clock her condition was about the same, with a slight increase of the lumbar pain. Temperature 103.6°; pulse 118; urine normal. October 14, 9 a. m.: temperature 102.8°; pulse 108; conjunctiva much injected; eyes glassy; tongue small, more coated, and furred at tip. Specific gravity of urine 1012; no albumen. At 4 p. m. her temperature was 103°; pulse 100. October 15 at 8 o'clock a. m., her temperature had fallen to 101°; pulse 80. She complained of nausea, and eyes were slightly jaundice. Urine scanty; specific gravity 1018; no albumen.

Leaving Key West at 10 o'clock a. m., October 15, I was unable to get further notes in this case. This case and the two I saw at the barracks are, in my opinion, cases of genuine yellow fever. The physicians of Key West are almost unanimous in the opinion that the case of McClintock and those which occurred at the barracks

were cases of yellow fever, but claim that McC.'s was the first case occurring this summer. This granted, it is necessary to admit that the fever originated in Key West. On the other hand, however, it is certain that a pernicious fever had been prevailing for several months before McClintock was taken ill.

But two facts will attract attention: First, that the house where McClintock was taken ill, and the barracks, where the next acknowledged cases occurred, are quite a distance apart. Secondly, that both are in the region where the "congestive fever" had been raging for the last three months. Just as I was leaving Key West four new cases were reported, one of them at the barracks. I left Key West October 15, at 10 o'clock a. m.

CLOSING OF INSPECTION STATIONS.

Dr. R. W. Mitchell, member of the National Board of Health, announces under date of October 18 that inspections at New Orleans were suspended on the 15th, and the station below Vicksburg was closed at the same time.

ABSTRACTS FROM CONSULAR REPORTS.

AMOY, CHINA.—Reports from United States Consul W. E. Goldsborough to August 28 state that the usual dysenteric and malarial diseases of the summer prevail, but no epidemic or contagious diseases are noted.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys reports 76 deaths in Bridgetown during the month of August, being at the annual rate of 45.6 per 1,000. Mean temperature, 83°; general sanitary condition, good.

BELIZE, HONDURAS.—The report for the week ending August 28 shows only one death in a population of 4,000. The report of the public hospital for the month of August gives 11 patients remaining August 1, 22 admitted in August, 1 death, 22 discharged, and 10 remaining August 31.

BUENOS AYRES.—United States Consul E. L. Baker, under date of August 23, states that his collection of statistics for reports has been interrupted by the civil war, and the city is still under martial law. This state of affairs, with a close siege by land and a rigid blockade of the port, has led to almost entire neglect of sanitary matters, and the city is now in a deplorable condition. The public health has for the past six months been very good, but with the approach of warm weather, in the present foul condition of the streets, there is much reason to fear an epidemic of yellow fever. Small-pox prevailed extensively in June and July, but is now disappearing, and the cases occurring are milder in type.

COLON, ASPINWALL.—United States Consul J. Thorington, under date of September 25, reports that "Chagres fever" and other malarial diseases prevail. There are but two seasons—the wet, from May till near the end of December, when land breezes prevail: during the dry season the trade-winds blow, and there is less sickness, but the climate is debilitating at all times. Some improvement has been made recently in the drainage and cleanliness of the town. The population is about 3,000. The death-rate by the last report was only 16 per 1,000 per annum, but being only for one week, it gives no indication of the annual rate.

CONSTANTINOPLE.—The Bulletin Sanitaire of September 14, forwarded by United States Consul G. H. Heap, reports a general decrease of typhoid and typhus fevers in the Turkish provinces.

FLUSHING, NETHERLANDS.—United States Consul P. Smith, under date of September 30, states that during the months of August and September "a few people died of ordinary sickness," but there is so little sickness that the apothecaries are taking a general vacation in the absence of business. The military surgeon reports the same healthy condition among the troops in garrison, only seven cases of slight sickness occurring in three weeks among 700 men.

FOOCHOW, CHINA.—Advices from United States Consul J. C. Wingate to August 21 report no change in the sanitary condition of the place.

GONAIVES, HAYTI.—The report for 14 weeks ending August 21 shows a total of 41 deaths; population and death-rate not noted. The causes are not given, but it is stated that no case of contagious or infectious disease has been observed.

HAVANA, CUBA.—During the week ending October 15 there were 12 deaths from yellow fever, and the number of cases in the city at that date is supposed to be at least 45. Four vessels in the harbor are known to have one or more of their crews sick with the fever, either on board or ashore. Since October 1 the number of fatal cases of "pernicious fever" has increased to a suspicious degree. The Spanish bark *America*, which sailed for New Orleans October 10, and the Spanish bark *VII de Noviembre*, which sailed for Charleston, S. C., October 14, are believed to have had yellow fever on board while in port. There were 15 deaths from small-pox during the week.

LONDONDERRY, IRELAND.—United States Consul A. Livermore, under date of October 7, states that his sanitary reports are founded only upon the published statements of the public institutions, as the reports of private practice are not furnished to him. No applications are now made at the United States consulate for bills of health by masters of vessels sailing for ports in the United States.

MALTA AND GOZO.—During the five weeks ending September 15 there were 350 deaths from all causes in a population of 154,830, giving an annual death-rate of 23.6 per 1,000. No scarlet fever is reported, and only 1 death each from measles and diphtheria. Among the principal causes of death were: Diarrhœal diseases, 78, of which 12 were dysentery; consumption, 19; other lung diseases, 14; heart disease, 14; typhoid fever, 10, and old age, 15.

MOSCOW, RUSSIA.—United States Consul A. Weber reports, during the month of July, 4 deaths from cholera, 8 from small-pox, and 95 from typhoid fever. Diseases of the lungs caused 297 deaths and diarrhœal diseases 1,050. The total of deaths during the month was 2,469, and the population being taken at 601,970, the annual death-rate was 48.3 per 1,000. Mean temperature, 68°.

NINGPO, CHINA.—United States Consul E. C. Lord sends reports to September 4. Typhoid fever is the only contagious disease noted, but the extent of its prevalence cannot be learned.

PUERTO CABELLO, VENEZUELA.—United States Consul A. Lacombe, under date of September 4, states that no yellow fever has existed in that port since 1868. Near the close of 1879, two vessels with cargoes of beef from Buenos Ayres had a few cases on board while in port, but, owing to precautions taken, the port was not infected. The consul incloses a certificate from General L. F. Mora, chief of the department and president of the board of health. This certifies that no epidemic or contagious disease has existed for several years at Puerto Cabello, and that clean bills of health have been regularly given. The statement is certified by the consuls of Spain and Germany.

QUEENSLAND, AUSTRALIA.—The report for July from Brisbane district gives the population of the town and suburbs as 33,884. There were 99 births, being at an annual rate of 50.8 per 1,000; deaths, 35; annual rate, 18 per 1,000. Ten of the deaths were under 5 years. Mean temperature, 61°; prevailing winds, southwest.

SABANILLA, UNITED STATES OF COLOMBIA.—United States Consul E. P. Pellet reports, under date of September 4, that no cases of yellow fever have occurred at Baranquilla since August 18. The cases which have occurred have all been among foreigners, and nearly all have proved fatal. Those who are not compelled to visit that country during the season of danger should wait until December, as they come at the risk of their lives in the summer and fall.

SANTA CRUZ, PALMA, CANARIES.—United States Consul F. W. Lavers reports 16 deaths during the month of August in a population of 6,070; annual death-rate, 31.3 per 1,000. Causes of death not stated.

SINGAPORE.—United States Consul A. G. Studer reports his district free from contagious or infectious diseases up to September 13, 1880.

SYDNEY, AUSTRALIA.—The report for the city and suburbs for the month of July gives a total of 336 deaths in a population of 136,483, making the annual death-rate 29.5 per 1,000. The births during the month were 720, being at an annual rate of 63.3 per 1,000. This would indicate a remarkable natural increase, and the population has probably been largely increased by immigration; yet the reports are still based on the census of 1871, and the above rates must be greatly in error.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

JAPAN.—The report of Dr. T. H. Streets, U. S. N., for August notes 4 cases of choleraic diarrhœa, 3 of typhoid fever, and 4 of other contagious diseases in Yokohama. There were 2 deaths from typhoid fever, and 166 from causes not stated.

PENSACOLA, FLA.—The president of the board of health, S. C. Cobb, forwards under date of October 17 the sanitary history of two vessels sailing from Havana for Pensacola and New Orleans:

1. The British bark *Prince Rupert*, bound for New Orleans, has the following notes on her bill of health given by H. C. Hall, United States consul at Havana, September 25; vessel last from Liverpool with coal. In September, 1879, had yellow fever on board at Havana, and her captain died of it. This time six of her crew have been sent

to hospital, but the physicians there state that none of them have yellow fever, and none have died. The vessel has remained in the open bay, and her sanitary condition is considered good. Was fumigated September 24 with 100 pounds of sulphur, and solution of sulphate of iron and carbolic acid freely used in the bilges, &c. Ballast of white stone, in good condition; no cargo. Crew of 21 men and one passenger; all well at time of sailing. The sanitary condition of the port (Havana) is noted as "bad in the city and at and near the wharves." For the week ending September 25 sixteen deaths from yellow fever and ten from small-pox are reported.

2. The Spanish brig *Maria Elisa*, bound for Pensacola, has the following notes on her bill of health from Consul H. C. Hall, October 11: Vessel last from Ship Island with lumber. No reliable account of her previous to this voyage. Arrived at Havana September 15, and was unloading for 18 days at a suspected wharf; was six days in the open bay before sailing. No sickness known to have occurred on board while in port. The same measures for purification were used as in the *Prince Rupert*. Vessel in ballast of bluestone; no cargo. Crew of 9 men all well October 11; seven of them have had yellow fever in former years. For the week ending October 9 fourteen deaths from yellow fever and four from small-pox are reported.

VICKSBURG, MISS., October 23.—Dr. W. T. Balfour reports that three cases of scarlet fever occurred in one family, between September 29 and October 3. A case also was reported October 10 in a family two doors from the first. The source of contagion was unknown, but it may have been from New Orleans or Natchez. No new cases are reported since October 4, and those mentioned all recovered. The city is very healthy, and two premature births constitute the total mortality for the week ending October 23.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—After August 28, the reports from hospitals in the United States will be published every four weeks in a table giving the totals for that period. Only those hospitals sending reports for the four weeks will be represented in the table.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 16, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ....Portland	34,000	1	6	9.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H....Concord	14,000	.....	5	18.0	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt.....Burlington	16,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass ...Boston	375,000	71	162	22.5	29	6	14	9	5	.....	1	.....	12	.....	1	1	3	41	3
Cambridge	52,800	12	24	21.8	4	1	1	4	.....	.....	1	.....	2	.....	.....	.....	.....	8	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,286	1	9	17.2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Newburyport	13,800	2	5	18.6	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	1	2	14.0	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Nantucket	3,777	.....	1	13.8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	1	4	29.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowell	59,340	11	20	17.5	3	.....	2	2	1	.....	.....	.....	2	1	.....	.....	1	7	1
Worcester	58,000	5	16	14.3	3	.....	5	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Lynn	38,400	5	13	17.7	1	.....	2	1	2	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Brockton	13,598	.....	4	15.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,640	2	5	71.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Milford	9,200	.....	4	22.3	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Chicopee	11,000	.....	1	4.8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	2	3	12.4	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	2	9	18.8	.....	1	2	.....	2	.....	.....	.....	3	.....	.....	.....	.....	5	.....
Springfield	33,000	3	12	19.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I.....Providence	104,862	8	36	17.9	3	1	.....	3	4	.....	.....	.....	5	.....	.....	.....	.....	8	.....
Conn ....New Haven	63,000	8	19	15.5	1	4	3	.....	.....	1	.....	.....	3	.....	.....	.....	.....	8	.....
New Britain	14,000	.....	1	3.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fairfield	2,650	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Haven	1,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y .....New York	1,203,823	252	609	26.4	104	25	52	52	8	12	11	.....	69	.....	9	1	3	189	21
Brooklyn	564,448	117	271	25.0	41	16	18	32	1	7	2	.....	24	.....	4	.....	2	87	8
Poughkeepsie	20,200	3	6	15.6	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Newburg	18,043	2	6	17.4	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....
Utica	34,500	7	15	23.0	1	.....	.....	.....	.....	.....	.....	.....	1	.....	3	.....	1	.....	.....
Rochester	90,000	9	45	26.1	4	1	4	7	4	1	2	.....	3	.....	.....	.....	.....	10	3
Buffalo	155,159	21	59	19.1	8	1	1	4	6	4	3	.....	2	.....	.....	.....	.....	20	2
Cambridge	1,850	1	1	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	1	4	34.8	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Tarrytown	3,270	1	3	47.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
N. J .....Hudson County	209,000	34	87	21.7	10	3	3	5	1	1	3	.....	6	.....	6	.....	.....	16	7
Newark	138,000	27	60	22.7	11	1	3	3	.....	5	.....	.....	4	.....	.....	.....	.....	9	.....
Orange	13,213	2	3	12.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Camden	41,741	4	14	20.5	4	1	.....	.....	.....	.....	.....	.....	2	.....	.....	2	.....	3	1
Plainfield	8,000	.....	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa.....Philadelphia	850,000	87	284	17.4	59	3	4	6	11	1	4	.....	12	1	.....	13	1	.....	.....
Pittsburgh	156,649	32	91	29.9	3	2	1	10	2	.....	10	.....	5	.....	.....	.....	1	23	33
Erie	28,656	3	3	5.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Del .....Wilmington	44,000	2	15	17.7	2	1	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	1
Md .....Baltimore	393,796	52	127	16.9	26	3	.....	11	4	2	8	.....	2	.....	.....	.....	4	34	3
District of Columbia	180,000	31	84	24.3	18	2	8	2	3	6	.....	.....	2	.....	.....	.....	1	25	5
Va.....Norfolk	25,800	7	15	30.3	2	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	5	.....
Richmond	64,670	15	37	30.0	9	.....	1	1	2	.....	.....	.....	.....	.....	.....	.....	5	7	.....
Lynchburg	16,500	3	8	25.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C .....Wilmington	17,600	7	16	47.6	1	.....	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C .....Charleston	57,000	12	35	31.9	8	.....	1	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Ga.....Augusta	27,012	2	8	15.5	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Atlanta	38,000	2	7	9.5	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Savannah	33,248	18	30	47.3	2	.....	3	1	.....	2	.....	.....	4	.....	1	.....	.....	.....	.....
Rome	5,000	1	3	31.3	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Fla .....Jacksonville	10,000	1	4	20.9	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	3	4	17.5	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Ala .....Mobile	40,000	6	20	26.0	.....	.....	.....	.....	.....	1	.....	.....	2	.....	1	.....	.....	1	.....
Selma	7,500	1	2	13.9	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss.... Columbus	5,230	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	2	3	22.1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	2	11	45.9	1	.....	1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	1
La .....New Orleans	216,359	31	96	23.1	13	.....	7	3	2	9	.....	.....	2	.....	.....	.....	.....	.....	4
Shreveport	8,033	3	7	45.7	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....
Morgan City	2,018	.....	2	51.7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	.....	2	14.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex.....San Antonio	20,597	7	11	27.9	.....	.....	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austin	16,000	3	2	9.7	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ark .....Little Rock	22,000	.....	5	11.9	2	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn ....Nashville	43,543	7	15	17.7	3	.....	2	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	5	1
Clarksville	7,250	.....	1	7.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,800	.....	3	41.4	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Ky.....Louisville	175,000	6	29	8.6	4	.....	1	1	1	2	.....	.....	1	.....	.....	.....	.....	5	.....
Ohio .....Cleveland	175,000	.....	55	16.4	3	5	.....	5	1	.....	2	.....	1	.....	.....	.....	.....	.....	3
Gallipolis	4,500	2	2	23.2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Dayton	39,000	2	12	16.0	1	1	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	2	1
Portsmouth	11,320	1	3	13.8	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ind .....Indianapolis	75,350	17	31	21.2	2	2	2	2	.....	3	1	.....	2	.....	1	.....	1	14	.....
Richmond	13,000	2	3	12.4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Evansville	30,000	1	12	21.1	3	.....	2	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill .....Chicago	503,298	93	193	20.1	12	23	15	15	9	3	7	.....	9	.....	.....	.....	1	75	12
Peoria	34,850	2	9	13.1	1	.....	.....	1	.....	.....	5	.....	.....	.....	.....	.....	.....	7	.....
Aurora	12,059	.....	3	13.0	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Jacksonville	15,000	.....	2	7.0	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,000	.....	1	6.5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ....Milwaukee	116,000	25	38	17.1	3	1	1	1	2	.....	3	.....	2	.....	.....	.....	.....	10	.....
Beloit	5,000	.....	2	20.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn ....Saint Paul	41,800	2	7	8.8	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Mich ... East Saginaw	19,000	1	2	5.5	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint	9,000	1	2	11.6	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Iowa ....Keokuk	12,125	.....	1	4.3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Davenport	23,000	.....	10	22.8	3	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	1

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 16, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Mo ..... Saint Louis	333,577	38	115	18.0	12	1	11	6	4	5	1	.....	4	.....	1	.....	1	33	9
Colo ..... Boulder	3,030	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	31,000	2	10	17.3	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Kans .... Lawrence	8,500	3	3	18.0	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	2	5	10.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Cal ..... San Francisco	233,700	23	74	16.5	12	.....	4	2	2	.....	.....	.....	3	.....	2	.....	.....	10	3
Sacramento	21,500	1	3	7.3	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	4	5	23.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,893,750	1,184	3,129	20.7	452	110	199	198	95	94	66	1	204	2	32	17	27	679	133

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING OCTOBER 16, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass .... Boston	370,000	5,000	159	3	22.4	31.3
R. I ..... Providence	100,862	4,000	36	.....	18.6	.....
Del ..... Wilmington	38,000	6,000	13	2	14.4	17.4
Md ..... Baltimore	338,384	55,412	100	27	15.4	25.4
District of Columbia	120,000	60,000	41	43	17.8	37.3
Va ..... Richmond	37,971	26,699	15	22	16.6	43.2
Norfolk	14,400	11,300	5	10	18.4	46.2
S. C .... Charleston	25,000	32,000	13	22	27.0	35.7
Ga ..... Savannah	18,229	15,019	10	20	28.5	69.2
Augusta	16,182	10,380	2	6	6.5	28.1
Atlanta	22,000	16,000	5	2	11.9	6.5
Ala ..... Mobile	28,000	12,000	11	9	20.5	39.2
Selma	3,425	4,080	.....	2	.....	25.6
Fla ..... Jacksonville	6,000	4,000	2	2	17.4	26.1
Miss .... Columbus	2,760	2,470	.....	.....	.....	.....
Natchez	3,500	3,500	2	1	29.8	14.9
La ..... New Orleans	159,000	57,000	68	28	22.2	25.5
Shreveport	3,916	4,117	2	5	26.6	63.8
Baton Rouge	2,954	4,233	.....	2	.....	24.6
Tex ..... Austin	12,000	4,000	3	.....	13.0	.....
Tenn .... Nashville	27,874	15,669	8	7	14.7	23.1
Clarksville	4,000	3,250	.....	1	.....	16.1
Murfreesboro'	2,000	1,800	.....	3	.....	66.9
Ky ..... Louisville	153,125	21,875	19	10	6.5	24.5
Ohio ..... Portsmouth	10,320	1,000	3	.....	15.2	.....
Iowa .... Keokuk	11,165	960	1	.....	4.7	.....
Kans .... Lawrence	6,800	1,700	2	1	15.3	30.7
Totals	1,537,867	383,464	520	228	17.6	31.0

The following reports, for the week ending October 16, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 4; under 5 years, 1; consumption 1; croup 1. Allegheny, Pa., 78,000; deaths, 15; under 5 years, 6; consumption 1; croup 2; diarrhœa 1; diphtheria 2; scarlet fever 1; lung disease 1. Bath, Me., 8,000; no deaths. Brattleboro', Vt., 6,000; deaths, 1; consumption 1. Carrollton, Miss., 600; deaths 1; malarial fever 1. Chillicothe, Ohio, 11,000; deaths, 2; consumption 1. Circleville, Ohio, 6,400; deaths 2; malarial fever 1; old age 1. Clinton, Mich., 1,200; no deaths. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; deaths 2; accident 1. Dallas, Tex., 10,300; deaths, 5; under 5 years, 2; diarrhœa 2; malarial fever 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Dixon, Cal., 1,200; deaths 1; under 5 years, 1. Helena, Mont., 3,630; no deaths. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., 1,200; deaths 1; under 5 years, 1; whooping-cough, 1. Iuka, Miss., 816; no deaths. Jefferson, Texas, 2,241; deaths, 4; under 5 years 1. Kenosha, Wis., 5,500; deaths, 2; consumption 1; old age 1. Lebanon, Pa., 9,000; deaths, 1; consumption 1. Louisiana, Mo., 5,200; no deaths. Martinsburg, W. Va., 6,384; deaths, 1. Meridian, Miss., 4,013; deaths, 1; enteric fever 1. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; deaths, 2; under 5 years, 1; lung disease 1. Monmouth, Ills., 6,000; deaths, 3; under 5 years, 2; diphtheria 1; lung disease 2. Montgomery, Ala., 17,000; deaths, 4; under 5 years, 1; consumption 2; malarial fever 2. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 1; consumption 1. Muscatine, Iowa, 8,412; deaths 1. Muskegon, Mich., 11,300; deaths, 4; under 5 years, 4; diphtheria 1; accident 1. Niles, Mich., 4,200; deaths, 2; diphtheria 1. Painesville, Ohio, 5,504; deaths, 1; old age 1. Pass Christian, Miss., 2,000; deaths, 1; under 5 years, 1; whooping-cough 1. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; deaths, 2; malarial fever 1. Port Royal, S. C., 750; no deaths. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., 12,000; deaths, 4; under 5 years, 1; consumption 1; enteric fever 1; lung disease 1. Santa Cruz, Cal., 5,000; deaths, 1; under 5 years, 1; consumption 1. Shelbyville, Tenn., 1,919; deaths, 1. Springfield, Ohio, 21,000; deaths, 8; under 5 years, 2; consumption 1; diphtheria 1; enteric fever 1. Starkville, Miss., 1,454; deaths, 1. Summit, Miss., 1,808; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 3; under 5 years, 1; diphtheria 1. Winchester, Va., 5,000; no deaths. Winona, Minn., 10,000; deaths, 4; under 5 years, 1; diphtheria 1. Youngstown, Ohio, 15,089; death, 1; under 5 years, 1; lung disease 1. Total population, 333,442; deaths under 5 years, 31; total number of deaths, 81; annual rate per 1,000, 13.7.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	Oct. 9	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
Canada	Kingston	15,000	Oct. 16	12	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.7
Do	Montreal	135,000	Oct. 9	61	23.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	50.8
Bermuda	Hamilton	14,867	Oct. 5	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	....do	14,867	Oct. 12	1	3.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74.6
Bahamas	Nassau, N. P	13,000	Oct. 9	1	4.0	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	...do	13,000	Oct. 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
Cuba	Havana	195,437	Oct. 9	154	41.1	.....	.....	.....	12	.....	5	.....	3	.....	.....	.....	.....	82
Hayti	Port au Prince	30,000	Sept. 29	19	33.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91
Do	....do	30,000	Oct. 6	15	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
Do	Aux Cayes	9,000	Sept. 25	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
Do	....do	9,000	Oct. 2	6	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Honduras	Belize	4,000	Aug. 28	1	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.5
Do	....do	4,000	Sept. 4	3	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89.1
Do	....do	4,000	Sept. 11	3	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86.8
Do	....do	4,000	Sept. 18	1	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83.6
Aspinwall	Colon	2,500	Oct. 9	4	85.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
Mexico	Acapulco	3,500	Sept. 11	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	....do	3,500	Sept. 18	6	89.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	...do	3,500	Sept. 25	4	59.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Do	Matamoras	16,000	Oct. 9	9	29.3	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....
Ireland	Queenstown	10,000	Oct. 9	7	36.5	.....	.....	.....	.....	.....	.....	13	4	.....	.....	.....	.....	49.5
Do	Belfast	230,000	Oct. 9	82	23.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.5
Do	Dublin	314,666	Oct. 9	201	32.2	.....	.....	.....	.....	.....	1	.....	2	.....	3	.....	27	46.6
Scotland	Dundee	155,100	Oct. 2	58	19.5	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	15	1	56.4
Do	Glasgow	589,598	Oct. 2	199	17.6	.....	.....	.....	.....	.....	.....	.....	24	.....	.....	.....	18	54.1
Do	Leith	58,479	Oct. 9	19	16.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	47.0
England	London	3,254,260	Oct. 2	1,353	19.3	.....	.....	.....	.....	.....	2	.....	15	.....	.....	.....	103	56.6
Do	Bradford	197,196	Oct. 2	96	25.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Do	Bristol and Clifton	213,500	Oct. 2	86	21.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	58
Do	Tunstall	201,942	Oct. 2	106	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	62
Do	Liverpool	544,056	Oct. 9	319	30.5	.....	.....	.....	.....	.....	.....	3	4	17	2	39	38	47.6
Wales	Cardiff	82,364	Oct. 9	25	15.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	51.1
France	Paris	1,988,806	Sept. 30	906	23.9	.....	.....	.....	.....	.....	23	.....	41	.....	.....	.....	63	.....
Do	....do	1,988,806	Oct. 7	849	22.2	.....	.....	.....	.....	.....	21	.....	38	.....	.....	.....	101	.....
Do	Lyons	342,815	Sept. 25	155	23.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Rouen	104,209	Oct. 9	50	24.9	.....	.....	.....	.....	.....	8	.....	11	.....	.....	.....	7	.....
Switzerland	Zurich	22,103	Oct. 2	6	14.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Rotterdam	150,378	Oct. 9	71	24.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	.....
Germany	Berlin	1,096,644	Sept. 25	621	29.4	.....	.....	.....	.....	.....	.....	103	16	.....	.....	158	76	54
Do	Breslau	276,000	Sept. 25	124	23.4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	17	52
Do	Barmen	95,000	Oct. 2	27	15.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	52
Do	Bremen	109,000	Sept. 25	32	15.3	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	2	.....
Do	Brunswick	74,000	Oct. 2	33	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....
Do	Cologne	.....	Oct. 2	87	31.9	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	20	.....
Do	Mannheim	50,500	Oct. 2	19	21.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
Do	....do	50,500	Oct. 9	24	24.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
Do	Hamburg	400,000	Sept. 18	201	26.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Do	Frankfort	130,000	Oct. 2	41	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	55
Saxony	Leipsic	150,836	Oct. 2	58	19.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	52
Do	Chemnitz	92,383	Sept. 25	50	28.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	55
Do	Dresden	220,500	Sept. 25	105	24.8	.....	.....	.....	.....	.....	.....	1	1	.....	.....	11	11	54
Belgium	Antwerp	173,643	Sept. 25	90	27.0	.....	.....	.....	.....	17	13	27	2	.....	.....	.....	3	.....
Do	....do	173,643	Oct. 2	80	24.0	.....	.....	.....	.....	13	12	38	4	.....	.....	.....	5	.....
Do	Brussels	389,022	Oct. 2	172	22.9	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....
Denmark	Copenhagen	235,254	Sept. 28	130	28.8	.....	.....	.....	.....	.....	.....	36	2	.....	.....	16	1	51
Italy	Genoa	185,000	Oct. 9	98	27.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Austria	Vienna	746,243	Oct. 2	332	19.7	.....	.....	.....	.....	.....	6	.....	1	.....	.....	.....	15	55
Hungary	Buda-Pesth	344,604	Sept. 25	215	32.6	.....	.....	.....	.....	.....	6	.....	3	.....	.....	.....	2	.....
Russian Poland	Warsaw	357,169	Sept. 25	194	28.3	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	54
Sweden	Stockholm	169,429	Sept. 18	91	28.9	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	14	56
Norway	Christiania	116,801	Sept. 25	63	28.1	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	11	8	50
Portugal	Lisbon	225,152	Sept. 18	158	36.5	.....	.....	.....	.....	.....	1	.....	9	.....	.....	.....	.....	67
Do	Oporto	108,346	Sept. 18	91	43.8	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	65
Spain	Cadiz	65,028	Sept. 25	51	40.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	....do	65,028	Oct. 2	62	49.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	Seville	138,000	Sept. 19	98	37.0	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	10	84
Do	....do	138,000	Sept. 26	103	35.2	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	10	82
Barbary	Tripoli	20,000	Oct. 2	11	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81.4
Cape Colony	Cape Town	35,000	Sept. 20	21	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
India	Calcutta	429,535	Sept. 11	185	22.4	.....	8	.....	.....	.....	.....	.....	8	.....	.....	.....	1	80.1

OSTEN. 28th ST. N.Y.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, NOVEMBER 6, 1880. [No. 19.

MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
										Enteric.	Malarial.	Scarlet.	Yellow.							
	1880.																			
New Haven, Conn	September	63,000	40	66	12.6	11	1	3	8	2	3	.....	.....	4	.....	1	.....	1	18	3
Burlington, Vt	July	16,500	16	25	18.2	1	.....	10	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	August	16,500	13	20	14.5	3	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	September	16,500	14	21	15.3	1	.....	7	.....	.....	.....	.....	.....	3	.....	.....	.....	2	.....	.....
Amsterdam, N. Y	August	9,360	7	15	19.2	1	1	3	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	7	1
Do	September	9,360	6	14	17.9	2	1	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	3	2
Kingston, N. Y	....do	19,000	7	10	6.3	1	1	2	.....	.....	3	.....	.....	.....	.....	1	.....	.....	.....	2
Little Falls, N. Y	....do	6,910	2	10	17.4	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Rochester, N. Y	....do	90,000	53	112	15.0	4	1	10	9	1	1	2	.....	4	.....	.....	.....	.....	31	5
Elizabeth, N. J	....do	28,000	.....	47	20.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	October	28,000	.....	50	21.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hudson County, N. J	July	209,000	262	461	26.4	48	5	137	5	5	10	9	.....	25	2	7	.....	1	192	29
Do	August	209,000	191	369	21.1	42	8	70	6	10	2	13	.....	22	.....	4	.....	1	127	28
Do	September	209,000	169	381	21.9	*	*	37	18	10	16	7	.....	32	.....	2	.....	.....	107	31
Paterson, N. J	August	50,950	48	109	25.7	8	3	13	3	.....	.....	1	.....	2	.....	.....	.....	.....	.....	7
Do	September	50,950	46	96	22.6	8	3	9	5	.....	.....	.....	.....	2	.....	1	.....	.....	.....	2
Vineland, N. J	....do	8,000	2	5	7.5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wilmington, Del	....do	42,500	27	65	18.3	6	1	4	1	2	3	1	.....	5	.....	.....	.....	.....	.....	4
Scranton, Pa	August	40,000	21	48	14.4	6	.....	8	.....	.....	.....	.....	.....	2	3	.....	.....	.....	24	5
Do	September	40,000	18	46	13.8	2	.....	5	4	2	1	5	.....	5	.....	.....	.....	.....	17	3
District of Columbia	July	180,000	96	371	24.7	43	3	75	2	8	7	3	.....	22	.....	5	.....	7	126	9
Do	August	180,000	162	325	21.7	56	7	37	7	9	9	5	.....	17	.....	.....	.....	.....	94	12
Norfolk, Va	....do	26,200	32	60	27.5	5	.....	16	4	2	5	.....	.....	3	.....	.....	.....	.....	27	4
Do	September	26,200	26	62	28.4	11	.....	12	7	.....	8	.....	.....	1	.....	.....	.....	.....	24	5
Petersburg, Va	....do	22,000	32	72	39.3	6	1	22	.....	4	5	.....	.....	1	.....	.....	.....	.....	.....	.....
Do	October	22,000	29	60	32.7	8	.....	10	.....	3	1	.....	.....	5	.....	.....	.....	.....	.....	.....
Mobile, Ala	July	40,000	22	82	24.6	7	.....	4	.....	3	2	.....	.....	.....	.....	2	.....	.....	10	1
Do	August	40,000	23	71	21.3	9	.....	2	.....	1	11	.....	.....	1	.....	1	.....	.....	19	2
Do	September	40,000	28	75	22.5	9	1	1	.....	1	7	.....	.....	4	.....	.....	.....	1	12	2
Selma, Ala	....do	7,505	10	14	22.0	1	.....	1	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1
Nashville, Tenn	....do	43,543	19	67	18.5	12	.....	9	.....	6	2	2	.....	1	.....	.....	.....	1	.....	2
Wheeling, W. Va	....do	32,000	14	39	14.6	.....	.....	3	4	3	.....	1	.....	1	.....	1	.....	.....	13	.....
Columbus, Ohio	August	.....	.....	61	.....	9	2	9	8	3	1	.....	.....	4	.....	2	.....	.....	.....	4
Lansing, Mich	....do	8,326	5	20	28.3	3	.....	4	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Richmond, Ind	September	13,000	8	16	14.8	4	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	6	3
Chicago, Ill	....do	503,298	445	803	19.1	70	37	113	85	25	9	32	.....	58	2	6	2	7	328	32
Milwaukee, Wis	August	115,761	168	248	25.5	12	1	68	8	1	2	.....	.....	16	.....	3	.....	2	77	8
Do	September	115,761	108	196	20.3	16	1	37	10	1	5	5	.....	12	.....	5	.....	2	58	6
Watertown, Wis	August	10,000	4	8	9.6	1	.....	2	1	.....	1	2	.....	.....	.....	1	.....	.....	5	.....
Do	September	10,000	5	9	10.8	.....	1	3	.....	.....	.....	2	.....	1	.....	.....	.....	.....	5	.....
Saint Paul, Minn	August	41,800	43	79	22.7	5	.....	26	2	5	1	.....	.....	2	.....	.....	.....	.....	.....	3
Keokuk, Iowa	September	12,125	3	10	10.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Virginia City, Nev	August	10,000	8	19	22.8	2	.....	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Do	September	10,000	12	22	26.4	.....	.....	5	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Oakland, Cal	August	35,000	12	33	11.3	3	.....	3	1	1	1	.....	.....	.....	.....	.....	1	.....	.....	7
Do	September	35,000	11	38	13.3	5	.....	2	1	2	1	1	.....	2	.....	.....	1	1	.....	1
Sacramento, Cal	August	21,500	.....	24	13.4	2	.....	2	1	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Do	September	21,500	.....	34	19.0	.....	.....	4	.....	.....	1	.....	.....	3	.....	.....	.....	.....	.....	.....
Los Angeles, Cal	August	11,000	.....	16	17.5	5	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Vallejo, Cal	....do	7,000	.....	7	12.0	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Do	September	7,000	.....	9	15.4	3	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....

* Figures omitted in the report.

NOTES.

NEW HAVEN, CONN.—For September: Mean temperature, 64°.3; maximum, 72°; minimum, 57°; mean humidity, 79; prevailing winds, south; rain on 7 days; rainfall 3.73 inches.

BURLINGTON, VT.—July: Still-births, 2; births, 18; marriages, 4; mean temperature, 71°.7; mean humidity, 62; rainfall, 2.3 inches.

BURLINGTON, VT.—August: Births, 23; marriages, 9; mean temperature, 68°.4; mean humidity, 62.7; rainfall, 2.26 inches.

BURLINGTON, VT.—September: Still-birth, 1; births, 25; marriages, 5; mean temperature, 62°.9; mean humidity, 68.6; rainfall, 3.26 inches.

HUDSON COUNTY, N. J.—July: Births, 249; marriages, 79; still-births, 29.

HUDSON COUNTY, N. J.—August: Births, 227; marriages, 83; still-births, 26.

HUDSON COUNTY, N. J.—September: Births, 300; marriages, 176; still-births, 28.

WILMINGTON, DEL.—September: White population, 38,000; deaths, 47; annual rate, 14.8 per 1,000. Colored population, 6,000; deaths, 18; annual rate, 36.0 per 1,000.

SCRANTON, PA.—August: Births, 54; marriages, 12.

SCRANTON, PA.—September: Births, 62; still-born, 1; marriages, 13.

DISTRICT OF COLUMBIA.—July: Deaths, white, 192; annual rate, 19.2 per 1,000; colored, 179; annual rate, 35.8 per 1,000; births reported, 187 white; annual rate, 18.7; 150 colored; annual rate, 30 per 1,000; still-births, 23: white, 10; colored, 12; unknown, 1. Marriages reported, 29 white, 23 colored. Highest temperature, 98°; lowest, 59°; mean, 77°.2; prevailing winds, northwest; mean humidity, 65; rain on 14 days; rainfall, 2.25 inches.

DISTRICT OF COLUMBIA.—August: Deaths, white, 154; annual rate, 15.4 per 1,000; colored, 171; annual rate, 34.2 per 1,000; births reported, 173 white; annual rate, 17.3; colored, 137; annual rate, 27.4 per 1,000; still-births, 28: white, 6; colored, 22. Marriages reported, 37 white, 17 colored. Highest temperature, 95°; lowest, 59°; mean, 75°; prevailing winds, south; mean humidity, 70.8; rain on 14 days; rainfall, 3.83 inches.

NORFOLK, VA.—August: Deaths, 24 white; annual rate, 19.3 per 1,000; colored, 36; annual rate, 38.2 per 1,000. Mean temperature, 76°.8; highest, 95°; lowest, 62°; mean humidity, 73.8; prevailing winds, southwest; rainfall, 9.9 inches. The deaths under 5 years were 8 white and 24 colored; annual rates, 6.5 white, 25.5 colored.

NORFOLK, VA.—September: Deaths, 31 white; annual rate, 24.9; colored, 31; annual rate, 32.9 per 1,000. Mean temperature, 71°.3; highest, 96°; lowest, 54°; mean humidity, 70.4; prevailing winds, southwest; rainfall, 4.07 inches. The deaths under 5 years were 9 white and 17 colored; annual rates, 7.3 white, 26.9 colored.

PETERSBURG, VA.—September: Population, 10,000 white, 12,000 colored; deaths, 20 white; rate, 24 per 1,000; colored, 52; rate, 53.6 per 1,000; deaths under 5 years, 7 white; annual rate, 8.4 per 1,000; colored 25; annual rate, 25 per 1,000; Still-births 6: all colored.

PETERSBURG, VA.—October: Deaths, 22 white; annual rate, 26.4. colored, 38; annual rate, 38 per 1,000; deaths under 5 years; white, 8; annual rate, 9.6; colored, 21; annual rate, 21 per 1,000.

MOBILE, ALA.—July: Deaths, 35 white; annual rate, 15 per 1,000; colored, 47; annual rate, 47 per 1,000; still-births, 8: all colored; mean temperature, 80°; mean humidity, 76.7; prevailing winds, north; rainfall, 4.9 inches.

MOBILE, ALA.—August: Deaths, 29 white; annual rate, 12.4; colored, 48; annual rate, 48 per 1,000; still-births, 5; white, 1; colored, 4; mean temperature, 80°.3; mean humidity, 79.6; prevailing winds, north; rainfall, 4.7 inches.

SELMA, ALA.—September: Deaths, white, 5; annual rate, 17.5; colored, 9; annual rate, 26.4 per 1,000; births, white, 16; colored, 19; deaths under 5 years, 3 white, 7 colored; population, 3,425 white, 4,080 colored.

NASHVILLE, TENN.—September: Deaths, 35 white; annual rate, 15.0; colored 32; annual rate, 24.5 per 1,000; still births, 5: white, 1, colored 4; mean temperature, 68°.2; mean humidity, 72.2; prevailing winds, northwest; rain on 13 days; rainfall, 5.4 inches.

WHEELING, W. VA.—September: 1 still-birth; 3 premature births.

COLUMBUS, OHIO.—Still-births, 2.

CHICAGO, ILL.—September: Mean temperature, 63°; mean humidity, 67; prevailing winds, southwest; rain on 18 days; rainfall, 2.25 inches.

MILWAUKEE, WIS.—August: Highest temperature, 91°; lowest, 51°; prevailing winds, southeast; rain on 14 days; rainfall, 3.54 inches; still-births 10; premature, 1.

MILWAUKEE, WIS.—September: Highest temperature, 85°; lowest, 35°; prevailing winds, southwest; rain on 12 days; rainfall, 1.85 inches.

SAINT PAUL, MINN.—August: Mean temperature, 69.5; prevailing winds, northwest; rain on 12 days; rainfall, 2.6 inches.

KEOKUK, IOWA.—September: Mean temperature, 66.°3; prevailing winds, south; rain on 7 days; rainfall, 3.2 inches.

OAKLAND, CAL.—August: Mean temperature, 59°.6; mean humidity, 86; no rain; births reported, 63; marriages, 30; of the pupils in public schools, 4.3 per cent. were reported sick during the month.

OAKLAND, CAL.—September: Mean temperature, 58°.2; mean humidity, 87; no rain.

THE INTERNATIONAL SANITARY CONFERENCE.

The honorable Secretary of State forwards to the National Board of Health notes accepting the invitation to the International Sanitary Conference to be held in Washington on the first day of January, 1881, on the part of the following governments:

Spain will be represented by Señor Mendez de Vigo, minister to the United States, and by a medical officer not yet appointed.

France will appoint delegates, but they are not yet named.

Venezuela accepts the invitation, but the delegates are not yet appointed.

Mexico will be represented by Señor Don Juan Navarro and Señor Don Ignacio Alvarado, as previously stated in the BULLETIN.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

ALEXANDRIA, EGYPT.—Dr. Neroutsos Bey, President of the General Board of Health of Egypt, under date of October 14, reports that the general sanitary condition of Egypt has been very satisfactory of late, with the exception of an epidemic of *dengue* fever which began in Cairo and soon spread over the whole country. In Cairo more than half of the population were attacked, but the mortality was small. It is worthy of note that the same fever prevailed over the whole southeastern portion of the United States at the same time.

HAVANA, CUBA.—During the week ending October 22, there were 18 deaths from yellow fever, 2 of which were from the American bark *R. A. Allen*. There are about 35 cases in the city at present. It is believed that the Spanish bark *Teresa Figueras*, which has cleared for Savannah, Ga., had yellow fever on board while in the port of Havana.

MONROE, MICH.—Dr. A. J. Sawyer reports 14 deaths, for the six months ending July 31, in a population of 5,000. Annual rate, 5.6 per 1,000. The causes of death were: diphtheria 3, scarlet fever 2, pneumonia 3, consumption 6.

PHILADELPHIA, PA.—Dr. R. A. Cleeman, health officer, sends the following report for the third quarter of 1880:

The climate of Philadelphia during the third quarter of 1880 presented, for the most part, its ordinary characteristics. There was no uncommon degree of heat nor of cold, neither of dryness or moisture, nor excess nor deficiency of rainfall. The mean temperature, calculated from the monthly averages furnished at the United States signal station in this city, was 72.1° F., mean humidity 67° (saturation = 100°), and the rainfall 13.93 inches. Yet the temperature was more equable than usual, since July and August, with mean temperatures respectively of 75.6° F. and 72.8° F., were each about 1 degree cooler than common, while September, registering 67.7° F., was nearly two degrees warmer than its average. The rainfall was distributed somewhat differently from the averages in the several months, 7.74 inches of rain falling in July against the average, 5.22 inches, and only 1.10 inches in September against 3.39 inches. The precipitation in August, 5.09 inches, was about the average. These meteorological features suggest nothing exceptional for the death rate of the city, since they are those to which the majority of the inhabitants of Philadelphia have become acclimated.

The total number of deaths recorded during the quarter (thirteen weeks, July 4—October 3) was 4,451, divided among the several months as follows: July (four weeks) 1,741; August (four weeks) 1,304; September (five weeks) 1,406. The aggregate does not include the deaths of those prematurely born (29) and the still-born (65). This mortality is equal to an annual death rate of 21.07 deaths to each thousand inhabitants living, the population of Philadelphia being 854,542, according to the figures of the late United States Census as published informally. The rate is not unfavorable, especially when it is considered that the third quarter of the year in Philadelphia is generally the most sickly of all the quarters, this period being responsible, as a rule, for about thirty per cent. of the total mortality of the year. It will be remembered, however, that the death rate of the previous quarter (the second) this year was higher than usual, the number of deaths recorded for it having been 4,672, or more even than have occurred in the quarter now under consideration. I accounted for the unusual mortality (BULLETIN of August 7, 1880) by the earlier advent of the summer weather this year, and when considering the mortality from cholera infantum, on which the excess of deaths chiefly depended, I suggested that as we might expect the hot season to close sooner than usual and the deaths from this disease, which are so closely connected in their increase with a high temperature, to be curtailed in number, so the whole summer might not be behind others in healthfulness—a state of things actually attained, as the lowered death-rate of the third quarter now indicates.

The deaths of males exceeded those of females, 2,324 of the former dying to 2,127 of the latter.

The mortality was divided among the several ages as follows: Under one year, 1,305; between one and two years, 400; between two and five years, 249; between five and ten years, 128; between ten and fifteen years, 107; between fifteen and twenty years, 132; between twenty and thirty years, 401; between thirty and forty years, 350; between forty and fifty years, 336; between fifty and sixty years, 307; between sixty and seventy years, 305; between seventy and eighty years, 259; and beyond eighty years, 172. A greater proportion of children, it appears, perished before the second year of life was ended than is found in the annual death rate for this period of life in Philadelphia, while the ages from two to five years had, in a similar comparison, a lessened mortality. The first result is due to the prevalence of cholera infantum, the deaths from which are virtually limited to children in their first and second years, especially to those less than a year old; and the other, in great degree, to the marked decline which will be pointed out below, in scarlatina, diphtheria and croup, diseases which are most fatal to children between two and five years of age.

In the following list of causes of death, arranged after the manner of Dr. Farr, the number of deaths from each cause will be found.

I. ZYMOTIC DISEASES 1,170, including *miasmatic diseases* 1,141 (smallpox 50, scarlatina 48, diphtheria 51, croup 42, whooping cough 26, typhoid fever 151, typhus fever 5, erysipelas 4, puerperal fever 2, dysentery 64, diarrhœa 58, cholera infantum 528, cholera morbus 46, malarial fevers 21, rheumatism 7, cerebro-spinal meningitis 11, other miasmatic diseases 27); *enthetic diseases* 6; *dietic diseases* 20; *parasitic diseases*, 3.

II. CONSTITUTIONAL DISEASES 1,078, including *diathetic diseases* 145 (cancer 81, other diathetic diseases 64); *tubercular diseases* 933 (tabes mesenterica 319, phthisis pulmonum 569, other tubercular diseases 54).

III. LOCAL DISEASES 1,563, including *diseases of the nervous system* 715 (cephalitis 248, apoplexy 69, paralysis 98, convulsions 187, sunstroke 14, tetanus 39, other diseases of the nervous system 60); *dis-*

eases of organs of the circulation 181 (pericarditis 23, aneurism 8, heart diseases 141, other diseases of organs of circulation 9); *diseases of respiratory organs* 224 (bronchitis 56, pleurisy 7, pneumonia 131, other diseases of the respiratory organs 30); *diseases of the digestive organs* 317 (enteritis 157, peritonitis 37, intestine diseases 34, stomach diseases 2, liver diseases 79, other diseases of the digestive organs 8); *diseases of the urinary organs* 109 (nephritis 17, Bright's disease 52, other diseases of the urinary organs 40); *diseases of the generative organs* 7 (diseases of ovaries 2, uterus diseases 5); *diseases of organs of locomotion* 6 (caries and necrosis 3, joint disease 3); *diseases of the integumentary system* 4.

IV. DEVELOPMENTAL DISEASES 438, including *developmental diseases of children* 34, (malformations 21, teething 13); *developmental diseases of adults* 9 (childbirth 2, puerperal convulsions 7); *developmental diseases of old people* 138 (old age 138); *diseases of nutrition* 257 (debility 136, inanition 121).

V. VIOLENT DEATHS 196, including *accident or negligence* 180 (drowning 51, otherwise 129), *homicide* 3, *suicide* 13.

CAUSES NOT SPECIFIED, 6. Total, 4,451.

The whole number of deaths in the quarter was, as I have already mentioned, less than that in the previous three months. The exact difference was 221 deaths, yet in the third quarter the 1,170 deaths from zymotic diseases exceeded by 190 those in this class for the second quarter, the better showing for the total in the quarter now under examination being due to a decrease in the class of local diseases from 1,924 to 1,563, a falling off of 361.

In the zymotic class the increase was chiefly due to an augmented number of deaths from cholera infantum, an advance to 528 from 329, a difference of 179; but the deaths from the other diarrhœal diseases by typhoid fever, dysentery, diarrhœa, cholera morbus, also multiplied in number, as well as those from the malarial fevers and small-pox. On the other hand, measles disappeared from the list of the causes of death, and scarlatina, diphtheria, croup, cerebro-spinal meningitis, erysipelas, puerperal fever, with some allied diseases, had a greatly lessened mortality. It is interesting to note how the diseases above have grouped themselves together to suggest to us, as it were, the parallelism, or otherwise, of the conditions of their causation. Typhoid fever and malarial fevers being in company may lead us to recall the words of the distinguished president of the Epidermiological Society of London* when he places climatic conditions as a cause for enteric fever, even irrespective of filth. How important such conditions are in Philadelphia may be learned from the statistics of the health office, from which I have elsewhere† shown that the mortality annually culminates here in August with quite fixed variations in other months, a regularity which, though not inconsistent indeed with the idea that emanations from filth are the only cause of typhoid fever, still favors caution in accepting too exclusively this dogma.

The greater number of deaths from small-pox is a disagreeable fact. The mortality from this disease was decreasing till, in the month of July, it had diminished to four deaths; the number of deaths increased to thirteen in August, and then in September so many as thirty-three were counted, twice the mortality which occurred in February, the month responsible up to that time for the greatest number of deaths since the invasion of the disease in the previous November. With the recollection that the disastrous epidemic of 1871–1872 had its first mutterings in Philadelphia during the third quarter of the year, and burst suddenly into a fury in the fourth quarter, analogy may give rise to some gloomy speculations as to the future of this present examination of the zymotic, though small-pox has not as yet been shown to bear a fixed relation to the seasons like the other diseases with which it has been grouped above. The much greater proportion of the deaths from this disease belong to the south-eastern portion of the city, especially to the fourth ward, a district populated, in the density of 100,000 inhabitants to the square mile, by the most degraded portion of the community. This region lies at a distance of nearly four miles from the section in which small-pox first appeared, the whole intervening space, the heart of the city, which is closely built up, having so far escaped with but very few deaths. It seems probable that the ignorance and recklessness of the people in the district now invaded have invited the disease through carelessness in vaccination, and that the exemption of the other portions of the city is due to the more thorough use of this precious prophylactic.

The vaccine physicians of the board have been vaccinating with so much zeal that the appropriation to pay them has become exhausted, but an appeal has been made to the city council for more funds, which has been favorably reported upon by the finance committee, and will, without doubt, be answered with a new appropriation. Fully armed, then, we hope to wage again successful war against the enemy.

In my letter of February 28, discussing the mortality from typhoid fever during the last quarter of 1879, I called attention to some anomalies in the distribution of the deaths among the several months, which, notwithstanding that the whole mortality from the disease was not above the average for that period of the year, yet seemed to me to foretell a probable increase beyond the average in the number of deaths from the fever at the close of the following summer should the winter succeeding be mild. The winter was not severe, the spring unusually warm, and the result as anticipated, though the moderate heat of the summer and the heavy rain-fall of July doubtless made the disease less marked. The 151 deaths from the disease—40 in July, 65 in August, and 46 in September—are in number about fifty per cent. greater than the average mortality from typhoid fever in this quarter for the ten years preceding 1876. In the last-mentioned year 279 perished from the disease in the third quarter; in 1877 a lesser number, 177; in 1878 still less, 120; and in 1879 so few as 82; so that until this year there had been a steady decline since the year 1876. I am not aware that there has been any less done towards keeping the city clean than in the previous two years nor that the drinking water is more impure; hence I am inclined to attribute the entire increase to the climatic causes already spoken of as operative in the previous year and succeeding winter. Yet I would not for a moment relax in the warfare against filth, since we cannot ignore the instances in which this has been logically shown to be the determining agent of the disease. There is no difficulty in imagining that while the poison may find a congenial nidus in filth yet that it may flourish elsewhere, and that it develops more freely under favorable climatic conditions.

The deaths from cholera infantum, 528, though greater in number, as we have seen, than in the previous quarter, are considerably less numerous than those reported during the corresponding quarter of the previous year, as was rightly conjectured from the increased mortality in the second quarter of this year. Adding together the deaths from the disease in the first and second quarters of 1880, the total appears not much different from that for a similar period in the previous year, one in which the mortality from cholera infantum was below the average.

The increase in the number of deaths from dysentery, diarrhœa, cholera morbus and malarial fevers over the preceding quarter was from 19, 30, 22, and 6, to 64, 58, 46, and 21 respectively. The differences are marked, and such as experience has taught us to expect with the advancing summer, but they are not of sufficient intrinsic value to give these diseases permanent places in the death-list.

Scarlatina, as foreshadowed in a previous letter, declined in the number of its deaths, the diminution being as great as from 88 to 48 deaths, while diphtheria and croup each felt the influence of the season in a certain degree, there being 51 deaths from the former in the quarter, to 72 in the second quarter, and 42 from the latter to 62. The deaths from erysipelas were only 4 where they had been 18 in the previous quarter, and those from puerperal fever were but 2 where they had been 10. The better ventilation of houses from the constantly open windows and doors during the warm season must have its effect in scaling down the mortality from the above zymotics.

The great falling off in the number of deaths in the large class of local diseases, already alluded to, was due for the most part to the diseases usual in the mild season, in the mortality from bronchitis and pneumonia in the order of diseases of the respiratory system; from the two diseases combined there were 187 deaths in the third quarter, while there had been as many as 419 deaths from the same causes in the quarter preceding. It is worth while to call attention to the number of deaths reported from tetanus in the order of diseases of the nervous system. From this cause there were 39 deaths during the quarter, 29 of which occurred in July, in strong contrast to the mortality in the corresponding quarter of each of the previous three years, which was respectively 9, 4, and 13. The average annual mortality for the previous ten years from tetanus did not equal so large a number as this portion of a year has furnished, having been but 31. The reasons of the increase have not yet been thoroughly investigated. It is significant, however, that the large majority of the deaths took place in July, the month in which the celebration of the nation's birthday gives rise to the explosion of a good deal of gunpowder, and that the wounds which were followed by tetanus are known to have been caused in a great number of instances by the discharge of a toy pistol called the "climax." This miniature weapon is supplied with a blank cartridge composed of a metal cap, rifle powder containing a fulminate of mercury, and a pasteboard wad. I saw a young girl whose finger was bruised by the wad, and who died, I was informed subsequently, of tetanus. It seems thus probable that meteorological conditions were not especially in fault, as is often the case, in determining the increased mortality, but the greater number or character of the wounds made by this pistol was the disturbing element. The obvious inference is that a restriction should be placed upon the sale of so dangerous a plaything to children.

PERU, IND.—Dr. John H. Helm, president of the board of health, reports for the quarter ending September 30 a total of 39 deaths. The causes noted were: diarrhœal diseases 11, consumption 2, other lung diseases 3, measles 1, puerperal 2, malarial fever 1, and 2 from accidents.

WACO, TEX.—Dr. H. W. Brown reports, under date of October 26, that the town and vicinity have been quite free from epidemic diseases, and that the dry weather lately prevailing has been favorable to the health of the people.

* Sir Joseph Frazier's address at the Epidermiological Society.—*Lancet, Nov. 8, 1879.*

† Report on Meteorology and Epidemics.—*Trans. Col. Phys.. Philadelphia, Third Series, Vol. 3, 4, &c.*

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 23, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me....Portland	34,000	5	15	23.0	2	2	2	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Bangor	16,780	1	5	15.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt.....Burlington	16,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass....Boston	375,000	58	167	23.2	31	11	9	10	3	.....	.....	.....	19	2	.....	.....	.....	41	10
Cambridge	52,800	2	12	11.0	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,268	4	12	22.9	3	.....	1	2	.....	.....	1	.....	.....	.....	.....	.....	.....	7	.....
Newburyport	13,800	.....	5	18.6	1	.....	.....	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	2	5	18.5	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	1	4	55.2	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Plymouth	7,148	1	3	22.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowell	59,340	11	22	19.3	4	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Lawrence	39,000	2	17	22.7	5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Pittsfield	12,300	.....	1	4.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,000	9	17	15.2	3	2	1	.....	2	.....	3	.....	.....	.....	1	.....	.....	.....	.....
Lynn	38,400	9	17	23.2	3	1	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,508	1	2	7.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	3	8	18.9	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Bridgewater	3,640	.....	2	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,200	1	1	5.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	1	1	4.8	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	2	4	16.5	1	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Somerville	25,000	2	5	10.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Springfield	33,000	4	14	22.1	4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
R. I.....Providence	104,852	9	32	15.9	4	.....	2	.....	3	.....	1	.....	7	.....	.....	.....	.....	6	1
Conn....New Haven	63,000	5	18	14.7	3	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	2
New Britain	14,000	1	1	3.7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Haven	1,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y.....New York	1,203,823	228	570	24.6	88	25	36	37	7	12	15	.....	81	.....	4	1	4	158	25
Brooklyn	566,689	112	250	23.1	26	16	11	38	3	6	2	.....	27	1	4	.....	2	84	5
Yonkers	19,000	1	2	5.5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Poughkeepsie	20,200	1	6	15.6	1	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Newburg	18,043	2	4	11.6	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Rochester	90,000	6	30	17.4	4	.....	3	4	2	.....	1	.....	4	.....	.....	.....	.....	9	.....
Buffalo	155,159	20	48	16.1	5	3	1	4	2	2	.....	.....	5	.....	.....	.....	.....	12	4
Binghamton	17,326	1	6	18.2	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	1
Seneca Falls	6,000	.....	1	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J.....Hudson County	209,000	38	83	20.7	11	2	7	2	2	5	2	.....	13	.....	4	.....	.....	22	.....
Newark	136,400	16	53	30.9	10	3	.....	3	2	1	1	.....	6	.....	.....	.....	.....	9	2
Orange	13,213	2	3	12.0	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Camden	41,714	9	19	23.8	1	1	3	.....	1	.....	.....	.....	.....	.....	.....	1	.....	4	.....
Plainfield	8,000	.....	3	19.6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Pa.....Philadelphia	850,000	102	298	18.2	49	8	5	9	5	1	4	.....	17	.....	.....	11	3	.....	.....
Pittsburgh	156,649	25	53	17.4	4	2	1	8	1	.....	8	.....	5	.....	.....	.....	.....	17	6
Erie	28,565	5	12	22.2	4	1	.....	2	.....	.....	.....	.....	1	.....	1	.....	.....	3	1
Del.....Wilmington	44,000	5	19	23.3	2	1	.....	.....	1	.....	1	.....	2	.....	.....	.....	1	.....	1
Md.....Baltimore	393,796	68	182	24.2	25	4	8	4	9	1	16	.....	11	.....	.....	.....	4	46	3
District of Columbia	180,000	31	60	19.9	8	2	4	5	.....	6	.....	.....	6	.....	.....	.....	1	21	1
Va.....Norfolk	25,700	4	13	26.3	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1
Richmond	65,000	15	34	27.6	7	.....	1	2	1	1	.....	.....	2	.....	.....	.....	1	7	.....
Lynchburg	16,500	.....	8	25.3	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
N. C.....Wilmington	17,600	4	12	35.7	1	.....	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
S. C.....Charleston	57,000	24	32	34.2	3	.....	.....	.....	1	1	.....	.....	.....	.....	3	.....	.....	.....	2
Ga.....Augusta	27,012	9	13	25.7	1	1	4	.....	.....	1	.....	.....	2	.....	1	.....	.....	.....	.....
Atlanta	38,000	5	19	25.7	5	.....	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1
Savannah	33,248	11	25	39.4	3	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	1	.....	.....
Rome	5,000	2	4	41.7	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fla.....Jacksonville	10,000	2	5	26.1	1	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	3	8	34.8	1	.....	2	.....	1	1	.....	3	.....	.....	.....	.....	.....	.....	.....
Ala.....Mobile	40,000	2	11	14.3	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Selma	7,505	2	6	41.7	.....	.....	1	.....	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....
Miss....Columbus	5,230	1	2	39.9	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	2	3	22.1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	2	2	8.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La.....New Orleans	216,539	39	104	25.0	11	1	6	3	4	12	.....	.....	6	.....	.....	.....	.....	.....	1
Morgan City	2,018	.....	1	25.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Baton Rouge	7,187	.....	1	7.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex.....Austin	16,000	1	4	13.0	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galveston	22,308	2	9	20.9	1	.....	1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn....Nashville	43,543	1	13	15.3	3	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Clarksville	7,250	1	4	28.9	.....	.....	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Memphis	34,000	6	27	41.4	5	.....	1	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	3
Murfreesboro'	3,800	.....	3	41.4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky.....Louisville	175,000	13	34	10.1	.....	2	2	.....	2	.....	.....	.....	2	.....	.....	.....	.....	6	2
Ohio....Cincinnati	280,000	28	92	17.1	20	3	5	2	.....	.....	5	.....	9	.....	.....	.....	1	18	10
Cleveland	175,000	.....	54	16.1	3	8	5	10	2	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Gallipolis	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	5	16	21.4	1	1	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	4	1
Portsmouth	11,320	3	5	23.0	2	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind.....Indianapolis	75,350	19	34	23.2	3	1	1	3	2	1	.....	.....	7	.....	1	.....	1	11	2
Richmond	13,000	2	3	12.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evansville	30,000	5	12	20.9	2	.....	2	.....	1	5	.....	.....	2	.....	.....	.....	.....	.....	.....
Ill.....Peoria	34,850	6	11	16.5	2	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1
Aurora	12,050	.....	2	8.7	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....
Jacksonville	15,000	1	3	10.5	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	.....	2	12.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis.....Milwaukee	116,000	24	51	23.0	7	3	3	8	2	.....	1	.....	4	2	.....	.....	1	21	.....
Mich....East Saginaw	19,065	1	3	8.2	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint	9,000	.....	1	5.8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansing	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa....Keokuk	12,125	.....	3	13.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Davenport	23,000	1	2	4.5	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Mo.....Saint Louis	333,577	53	128	20.0	11	3	17	5	.....	3	1	.....	9	.....	2	.....	1	46	7
Nebr....Omaha	31,000	5	6	10.5	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 23, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Kans ....Lawrence	8,500	.....	6	48.1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo .....Boulder	3,030	1	2	34.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Utah ....Salt Lake City	25,000	.....	6	12.5	1	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Cal .....San Francisco	233,700	16	82	18.3	15	.....	3	1	4	.....	.....	.....	10	.....	.....	1	.....	13	4
Sacramento	21,500	1	6	13.6	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	1	.....
Los Angeles	11,000	1	2	9.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	1	7.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,702,545	1,129	3,031	20.3	442	121	168	180	74	83	66	3	276	3	24	14	21	598	105

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING OCTOBER 23, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death rate per 1,000. White.	Annual death rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	163	4	23.0	41.7
R. I .....Providence	100,862	4,000	31	1	16.0	13.0
Del .....Wilmington	38,000	6,000	18	1	20.0	8.7
Md .....Baltimore	338,384	55,412	144	38	22.1	35.9
District of Columbia	120,000	60,000	38	31	16.5	26.9
Va.....Norfolk	14,400	11,300	1	12	3.7	52.4
Richmond	38,200	26,800	17	17	18.8	33.4
S. C.....Charleston	25,000	32,000	12	20	25.0	52.0
Ga.....Savannah	18,229	15,019	10	15	28.5	51.9
Augusta	16,182	10,830	4	9	12.9	42.1
Atlanta	22,000	16,000	10	9	23.7	29.5
Ala .....Mobile	28,000	12,000	5	6	9.3	26.1
Selma	3,425	4,080	1	5	15.2	63.8
Fla .....Jacksonville	6,000	4,000	4	1	34.8	13.0
Miss .....Columbus	2,760	2,540	1	1	19.5	20.3
Natchez	3,500	3,500	.....	3	.....	42.7
La .....New Orleans	159,128	57,231	73	31	23.9	28.3
Shreveport	3,916	4,117	3	5	40.0	63.8
Baton Rouge	2,954	4,233	1	.....	17.7	.....
Tenn ....Nashville	27,874	15,669	9	4	16.5	13.2
Clarksville	4,000	3,250	.....	4	.....	64.2
Murfreesboro'	2,000	1,800	2	1	52.2	29.0
Memphis	17,293	16,707	13	14	39.2	43.7
Tex .....Austin	12,000	4,000	3	2	13.0	26.1
Ky .....Louisville	153,125	21,875	29	5	9.9	12.3
Kans ....Lawrence	6,800	1,700	3	3	23.0	92.1
Totals	1,534,030	399,063	595	242	20.2	31.7

The following reports, for the week ending October 23, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 19; under 5 years, 8; consumption 3; diarrhœa 3; diphtheria 3; lung disease 1; puerperal 1. Bath, Me., 8,000; deaths, 3; consumption 1; enteric fever 1. Brattleboro', Vt., 6,000; deaths, 2; under 5 years, 2; diarrhœa 1; scarlet fever 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 3; under 5 years, 1. Circleville, Ohio, 6,400; deaths, 3; under 5 years, 1; consumption 1; croup 1; accident 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,300; deaths, 4; under 5 years, 2; diarrhœa 1; malarial fever 1; lung disease 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Helena, Mont., 3,630; deaths, 3; under 5 years, 1; diarrhœa 1; lung disease 1; accident 1. Hernando, Miss., 1,000; deaths, 1; consumption 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 2; diarrhœa 1. Kenosha, Wis., 5,500; death, 1. Lebanon, Pa., 9,000; deaths, 3; under 5 years 1; lung disease 1. Louisiana, Mo., 5,200; deaths, 2; under 5 years, 2; diarrhœa 1; accident 1. Meridian, Miss., 4,013; deaths, 6; under 5 years, 1; consumption 1; diphtheria 1. Milledgeville, Ga., 3,000; deaths, 1; under 5 years, 1. Monmouth, Ills., 6,000; deaths, 2; under 5 years, 1; diphtheria 1; accident 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; death, 1; consumption 1. Muscatine, Iowa, 8,412; deaths, 4; consumption 1; malarial fever 1; scarlet fever 1; accident 1. Muskegon, Mich., 11,300; deaths, 3; malarial fever 3. Nebraska City, Neb., 5,200; deaths, 2; under 5 years, 2; consumption 1; diphtheria 1. Niles, Mich., 4,200; no deaths. Okolona, Miss., 2,000; no deaths. Painesville, Ohio, 5,504; deaths, 2; accident, 1. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; death, 1; under 5 years, 1; diarrhœa 1. Phœnixville, Pa., 6,692; deaths, 2; under 5 years, 1; croup 1. Port Royal, S. C., 750; death, 1; enteric fever 1. Ripley, Miss., 1,000; death, 1; under 5 years, 1; diarrhœa 1. Rock Island, Ill., 12,000; deaths, 5; under 5 years, 3; croup 1; malarial fever 1; scarlet fever 1. Rockland, Me., deaths, 2; consumption 1. Shelbyville, Tenn., 1,913; deaths, 3; under 5 years, 2; consumption 1; croup 1. Starkville, Miss., 1,454; death, 1; consumption 1. Steubenville, Ohio, 13,500; death, 2; under 5 years, 1. Summit, Miss., 1,808; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 3; under 5 years, 2; diphtheria 1. Winchester, Va., 5,000; deaths, 2; under 5 years, 1; consumption 1; croup 1. Winona, Minn., 10,000; death, 1. Youngstown, Ohio, 15,089; deaths, 3; under 5 years, 1; consumption 1; diarrhœa 1. Total population, 297,301; deaths under 5 years, 36; total deaths, 93; annual rate per 1,000, 16.3.

MISCELLANEOUS.

The letter of Dr. Nerontsos Bey, from Alexandria, Egypt, published in this number of the BULLETIN, reports the extensive prevalence of *dengue* fever in Northern Egypt. This region corresponds in geographical latitude with the Gulf coast of the Southern United States, where the same fever has prevailed. The isothermal difference is about 10 degrees. United States consuls located on the belt of latitude between 28° and 35° north are requested to note and report the occurrence of the *dengue* fever in any other countries.

INSPECTORS' REPORTS.

LA SOMA, MEXICO.—Dr. C. B. Combe, inspector for the National Board of Health, reports, under date of October 15, that all quarantine restrictions were removed at that date at the port of Bagdad, Mexico.

MINSTER, OHIO.—Dr. E. F. Wells sends the following report under date of October 20:

The health of this town and surrounding country is exceptionally good. This section of Ohio having since its settlement been annually scourged by malarial fevers has been comparatively exempt from the *intermittent* forms for the past three years, and in their stead has appeared remittent, typho-malarial, and typhoid fevers, as has ever been the case in the West with the *cessation* of clearing off forests and exposing virgin soil to the air by plowing, ditching, &c. During the past two months I have met with a few cases of typhoid fever and typho-malarial fever, as well as with remittents partaking of the typhous nature. A few cases of these have presented a peculiar tenderness of the *colon* in addition to the usual ileo-cæcal symptoms. Along the southeast bank of the reservoir erysipelas is prevailing to a limited extent, and in the vicinity of St. John, Mercer County, 6 miles west from here puerperal fevers have prevailed for more than a year. I have not been able to trace any connection between the erysipelas and child-bed fevers.

There occurred in this place one fatal case of diphtheria, on October 26, and a single fatal case nine miles west of here.

GUADALOUPE, WEST INDIES.—United States Consul S. F. Colardeau, under date of October 8, reports that there has been no case of yellow fever at Pointe à Pitre since his last advices. The troops are still kept in their mountain quarters, as the low lands are not y considered safe.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Oct. 16	2	20.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	54.0
Canada	Kingston	15,000	Oct. 23	1	3.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42.1
Do	Montreal	135,000	Oct. 16	59	22.8	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	4	53.1
Cuba	Havana	195,437	Oct. 16	160	42.7	.....	.....	.....	16	.....	14	.....	2	.....	.....	.....	.....	86.0
Guadeloupe	Point-a-Pitre	22,919	Sept. 4	16	22.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,919	Sept. 11	13	29.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,919	Sept. 18	14	31.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,919	Sept. 26	11	25.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,910	Oct. 3	8	18.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Domingo	San Domingo	8,000	Sept. 11	5	32.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.0
Do	....do	8,000	Sept. 18	8	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87.0
Do	....do	8,000	Sept. 26	8	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88.0
Do	....do	8,000	Oct. 2	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87.0
Do	....do	8,000	Oct. 9	9	58.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87.0
Hayti	Cape Haytien	7,500	Sept. 18	7	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	7,500	Sept. 25	8	55.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	7,500	Oct. 2	7	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	7,500	Oct. 9	5	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	7,500	Oct. 16	6	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Indies	Turks and Caicos Isl'ds	3,500	Sept. 25	4	59.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.0
Do	....do	3,500	Oct. 2	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.0
Do	....do	3,500	Oct. 9	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86.0
Do	....do	3,500	Oct. 16	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.0
Do	....do	3,500	Sept. 11	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.0
Do	....do	3,500	Sept. 18	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.0
Brazil	Bahia	135,000	Sept. 4	67	25.7	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
Do	....do	135,000	Sept. 11	73	28.0	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Do	....do	135,000	Sept. 18	77	29.5	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....
Do	....do	135,000	Sept. 25	82	31.4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Do	....do	135,000	Oct. 2	79	30.3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
Do	Rio de Janeiro	330,000	Sept. 25	156	24.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....
Teneriffe	Santa Cruz	16,610	Sept. 25	8	25.1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	74.0
Do	....do	16,610	Oct. 2	10	31.4	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	74.0
St. Helena	Jamestown	6,240	Sept. 18	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.2
Do	....do	6,240	Sept. 25	2	16.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.3
Do	....do	6,240	Oct. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73.1
Ireland	Queenstown	10,000	Oct. 16	5	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland	Dundee	155,000	Oct. 9	53	17.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	1	47.2
Do	Glasgow	589,598	Oct. 9	226	20.0	.....	.....	.....	.....	.....	.....	.....	16	.....	.....	.....	14	45.5
Do	Leith	58,479	Oct. 16	23	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	47.3
England	London	3,664,149	Oct. 9	1,398	19.9	.....	.....	.....	.....	.....	5	.....	20	.....	1	.....	113	50.5
Do	Sheffield	304,938	Oct. 9	99	17.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.8
Do	Tunstall	27,775	Oct. 16	8	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.7
Do	....do	27,775	Oct. 16	16	30.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	51.0
Do	Bristol and Clifton	213,560	Oct. 9	112	27.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	54.3
Do	Liverpool	544,056	Oct. 16	259	24.8	.....	.....	.....	.....	.....	.....	6	8	23	5	46	31	49.5
Do	Sheffield	304,938	Oct. 16	111	19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.1
Wales	Cardiff	82,364	Oct. 16	21	13.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	50.0
France	Rouen	104,902	Oct. 16	45	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Paris	1,988,806	Oct. 14	932	24.4	.....	.....	.....	.....	.....	28	.....	37	.....	.....	.....	101	.....
Holland	Amsterdam	316,952	Oct. 2	135	22.2	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	8	59.0
Do	....do	316,952	Oct. 9	173	28.5	.....	.....	.....	.....	.....	.....	.....	5	.....	1	.....	4	55.0
Do	Rotterdam	150,378	Oct. 16	65	22.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....
Germany	Berlin	1,096,644	Oct. 2	628	29.8	.....	.....	.....	.....	.....	.....	89	18	.....	3	147	65	55.0
Do	Breslau	276,000	Oct. 2	117	22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	53.0
Do	Brunswick	74,000	Oct. 9	35	24.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Barmen	95,000	Oct. 9	34	18.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	55.0
Do	Bremen	109,000	Oct. 2	33	15.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Do	Cologne	.....	Oct. 9	77	39.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....
Do	Hamburg	400,000	Sept. 25	192	25.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Do	Frankfort	130,000	Oct. 9	54	21.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	54.0
Do	Mannheim	50,500	Oct. 16	15	15.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.0
Saxony	Dresden	220,500	Oct. 2	92	21.7	.....	.....	.....	.....	.....	.....	1	1	.....	.....	11	11	53.0
Do	Chemnitz	92,383	Oct. 2	63	35.8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	54.0
Do	Leipsic	150,836	Oct. 9	69	23.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	54.0
Belgium	Brussels	406,638	Oct. 9	174	22.3	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	1	.....
Denmark	Copenhagen	235,254	Oct. 5	81	18.0	.....	.....	.....	.....	.....	.....	34	3	.....	.....	17	.....	49.0
Italy	Rome	305,161	July 31	178	30.4	.....	.....	.....	.....	.....	7	.....	.....	.....	2	.....	49	82.0
Do	....do	305,161	Aug. 7	172	29.4	.....	.....	.....	.....	.....	16	.....	.....	.....	3	.....	36	74.0
Do	Genoa	185,000	Oct. 16	89	25.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.0
Austria	Vienna	746,243	Oct. 9	282	17.1	.....	.....	.....	.....	.....	4	.....	3	.....	.....	.....	7	54.0
Hungary	Buda-Pesth	344,604	Oct. 2	200	30.3	.....	.....	.....	.....	.....	3	.....	3	.....	.....	.....	8	.....
Russian Poland	Warsaw	357,169	Oct. 2	199	29.0	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	59.0
Sweden	Stockholm	169,429	Sept. 25	100	31.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	21	55.0
Do	....do	169,429	Oct. 2	90	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	47.0
Norway	Christiania	116,801	Oct. 2	43	19.1	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	8	10	46.0
Portugal	Lisbon	225,152	Sept. 25	122	28.2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	70.0
Do	Oporto	108,346	Sept. 25	88	42.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	68.0
Spain	Carthagena	76,000	Sept. 4	36	24.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77.0
Do	....do	76,000	Sept. 11	42	28.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73.0
Do	Cadiz	65,028	Oct. 9	50	40.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73.0
Morocco	Tangier	15,000	Aug. 28	34	118.3	.....	.....	.....	.....	3	.....	2	.....	1	.....	.....	.....	90.0
Do	....do	15,000	Sept. 4	32	125.2	.....	.....	.....	.....	2	.....	3	.....	.....	.....	.....	.....	88.2
Do	....do	15,000	Sept. 11	27	93.8	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	83.2
Do	....do	15,000	Sept. 18	20	69.6	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	81.4
Do	....do	15,000	Sept. 25	25	87.0	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	86.0
Cape Colony	Cape Town	35,000	Sept. 27	21	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65.0
Egypt	Alexandria	220,000	Oct. 2	179	42.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	220,000	Oct. 9	179	42.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

National Board of Health

BULLETIN.

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MONTHLY REVIEW OF MORTALITY FOR OCTOBER, 1880.

The average population represented in the weekly reports for the five weeks from September 25 to October 30 is less than that for September by 182,170, and as compared with August shows a reduction of 461,963. The general death-rate of the country has fallen from 20.41 to 20.24, and has remained very near that mean for several weeks. The rate of mortality under 5 years, following the decline in diarrhœal diseases, has shown a much greater reduction; taking the means for September and October, the rate has fallen 11 per cent., but if the highest rate of last month be compared with the lowest of October, the reduction is 18 per cent.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
October 2..	7,775,954	2,884	19.35	1,155	7.75	40.05	595	3.99	20.63	413	2.77	14.32	182	1.22	6.31	249	1.67	8.63	169	1.13	5.86
October 9..	8,241,313	3,213	20.34	1,197	7.58	37.25	679	4.30	21.14	456	2.88	14.20	223	1.41	6.94	291	1.84	9.06	194	1.23	6.04
October 16..	7,893,750	3,129	20.62	1,184	7.83	37.83	656	4.33	20.96	452	2.98	14.44	204	1.35	6.52	308	2.04	9.83	198	1.31	6.32
October 23..	7,702,545	3,031	20.53	1,129	7.65	37.28	718	4.86	23.68	442	2.99	14.58	276	1.87	9.10	301	2.04	9.93	180	1.22	5.94
October 30..	7,351,894	2,861	20.30	1,036	7.35	36.21	711	5.04	24.85	445	3.16	15.55	266	1.88	11.71	327	2.32	11.43	207	1.47	7.23
Totals	38,965,456	15,118	.....	5,701	.....	.....	3,359	.....	.....	2,208	.....	.....	1,151	.....	.....	1,476	.....	.....	948	.....	.....
Means	7,793,091	3,023½	20.24	1,140½	7.63	37.71	671½	4.50	22.22	441½	2.96	14.61	230½	1.54	7.61	295½	1.98	9.76	189½	1.27	6.27

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
October 2..	80	0.54	2.78	46	0.31	1.60	230	1.54	7.98	96	0.64	3.33	2	0.01	0.07	28	0.19	0.97	109	0.73	3.78	6
October 9..	97	0.61	3.02	59	0.37	1.84	235	1.49	7.31	81	0.51	2.52	3	0.02	0.09	23	0.15	0.72	89	0.56	2.77	12
October 16..	110	0.73	3.51	66	0.44	2.19	199	1.32	6.36	95	0.63	3.03	2	0.01	0.07	27	0.18	0.86	94	0.62	3.00	17
October 23..	121	0.82	3.99	66	0.45	2.18	168	1.14	5.54	74	0.50	2.22	3	0.02	0.09	21	0.14	0.69	83	0.56	2.74	14
October 30..	120	0.85	4.19	68	0.48	2.38	118	0.84	4.12	43	0.30	1.50	4	0.03	0.14	23	0.16	0.80	63	0.45	2.20	13
Totals	528	.....	.....	305	.....	.....	950	.....	.....	389	.....	.....	14	.....	.....	122	.....	.....	438	.....	.....	62
Means	105⅔	0.71	3.49	61	0.41	2.06	190	1.27	6.28	77¾	0.52	2.57	2¾	0.02	0.09	24⅔	0.16	0.81	87⅔	0.58	2.90	12⅔

Causes of death.—Consumption and acute lung diseases are steadily increasing, having advanced from 3.99 to 5.04 during the month, and the mean is 55 per cent. higher than that for last month, having risen from 3.95 to 4.50. In this increase consumption has gained but 5 per cent., while other lung diseases show an advance of 37 per cent. since last month. The six principal zymotic diseases have changed their mean rates as follows: *Increased*—diphtheria, from 0.89 to 1.27, or 42 per cent.; scarlet fever, from 0.29 to 0.41, or 65 per cent. *Decreased*—enteric fever from 0.56 to 0.52, or 4 per cent.; measles, from 0.06 to 0.02, or 66 per cent.; whooping-cough from 0.21 to 0.16, or 24 per cent.; and malarial fevers from 0.65 to 0.58, or 11 per cent. The aggregate of the six diseases gives a decline in mean mortality from 2.96 to 2.66, or 11 per cent., since last month. Malarial fevers have in many places assumed the "typho-malarial" type, and malarial hæmaturia has been prevalent in some Southern States. Yellow fever has not spread in any part of the United States, only one death occurring in New Orleans; and though four deaths have been reported at Key-West, the fever has not extended to the mainland. Small-pox continues to increase, and the 62 deaths reported are but a part of those which have occurred.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,560,850	9,159	20.96	2,250	5.15	23.47	1,421	3.25	15.51	829	1.90	9.05	991	2.27	10.82	650	1.49	7.10
Southeast	1,490,476	3,101	21.71	593	4.15	19.13	442	3.09	14.26	151	1.06	4.87	169	1.18	5.45	105	0.73	3.39
Northwest	1,490,165	2,455	17.19	422	2.95	17.19	288	2.01	5.46	134	0.94	11.73	302	2.11	12.30	182	1.27	7.41

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES—Continued.

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	341	0.78	3.72	174	0.40	1.90	564	1.29	6.16	216	0.49	2.36	13	0.03	0.14	69	0.14	0.75	156	0.36	1.70	60
Southeast	64	0.45	2.07	63	0.44	2.03	193	1.35	6.23	89	0.62	2.87	.....	.....	.....	41	0.28	1.33	184	1.29	5.94	.....
Northwest	120	0.84	4.90	66	0.46	2.69	168	1.18	6.84	92	0.64	3.75	2	0.01	0.08	12	0.08	0.50	94	0.66	3.83	1

Distribution of diseases.—The increase of only 5 per cent. in the general mortality from consumption is due to its irregular distribution this month; the rate has advanced 8 per cent. in the Northeast and 9 per cent. in the Northwest, but in the Southeast it has fallen 27 per cent. On the other hand, acute lung diseases show an increase of 45 per cent. for the Northeast section, and of 11 per cent. for each of the others. But the increase of diphtheria from a rate of 0.33 to 1.27 in the Northwest section is the movement most worthy of observation in the zymotic class of diseases; in the other sections the disease is also increasing, but to a much less extent. Croup has followed diphtheria in its steady rise; but in this disease the Northeast and Northwest show nearly equal changes, the mortality being nearly doubled in each since last month, while the increase is only 32 per cent. for the Southeast section. Scarlet fever remains stationary at 0.46 per 1,000 in the Northwest, but has advanced rapidly in New England, raising the rate of the Northeast section from 0.25 to 0.40; and in the Southeast the increase has been from 0.25 to 0.44, or 76 per cent. In this section, however, the disease is chiefly represented by the city of Baltimore, which reports at least three-fourths of the fatal cases. The downward movement of the diarrhœal diseases has been most rapid in the Northwest, where the change is from 2.63 to 1.18, or 145 per cent., since last month; the rate has fallen 60 per cent. in the Northeast and 34 per cent. in the Southeast section. Enteric fever is nearly stationary, showing a small reduction of mortality in all sections, but with a tendency to increase at the end of October. Measles have become only a nominal factor in the general mortality, only 14 deaths having been reported in the five weeks. Whooping-cough has also fallen to a very low rate, from 0.21 last month to 0.16 in October. The reduction has been in the two Northern sections only; in the Southeast the disease still prevails, and has risen from 0.37 to 0.41 per 1,000. Malarial fevers have declined rapidly in the Southeast with the first frosts, and more slowly in the two Northern sections. The reported fatal cases of small-pox have been distributed as follows: Boston, 1; New York, 2; Lansingburgh, N. Y., 1; Camden, N. J., 8; Philadelphia, 48; Chicago, 1; and San Francisco, 1. Nothing more is heard of the *dengue* fever which prevailed so extensively through the Gulf and South Atlantic States; but the disease is reported as epidemic in Lower Egypt, in the same latitudes with its visitation here. The inspection stations at New Orleans, below Vicksburg, and at Cairo, Ill., have been suspended; there is reason to believe that these stations, with the active measures of sanitation instituted at Memphis and other previously infected places, have protected the Mississippi Valley from another invasion of epidemic yellow fever.

NOTE.—The reports for the week ending October 30 from Chicago and San Francisco were received only in time for insertion in the weekly table, but not in time to be incorporated with the reports on which this review is based.

ABSTRACTS FROM CONSULAR REPORTS.

AMOY, CHINA.—United States Consul W. E. Goldsborough reports, for the two weeks ending September 11, only one death among the foreign population. Dysentery and malarial fevers are the prevailing diseases, and are partly due to want of cleanliness and absence of drainage.

BORDEAUX, FRANCE.—United States Consul L. A. Price reports, for the month of September, 8 deaths from small-pox, 12 from typhoid fever, and 32 from other contagious diseases. Deaths under one year of age, 190; over 70 years, 80. Total number of deaths 476. Population, 215,140; annual death-rate, 26.9 per 1,000.

BRISTOL, ENGLAND.—The United States consul forwards the report of David Davies, medical officer of health, for the quarter ending October 2, 1880. The population of the city and county is estimated at 213,563; there were 1,777 births, giving an annual rate of 33.3 per 1,000; the deaths were 954, and the annual rate 17.9 per 1,000. Deaths under 5 years, 437, or 45.8 per cent. of the total; of these, 283, or 29.6 per cent. of all deaths, were under one year of age. Only two cases of small-pox were reported, and no deaths. Among the causes of death were, measles 3, scarlet fever 51, whooping-cough 11, enteric fever 14, diarrhœa 124, consumption 85, other lung diseases 80, diseases of the brain 57, of the heart 62, puerperal 3, violence 44. With regard to typhus fever, the health officer remarks that it has been extinguished in the city for a considerable period, "except when introduced from New York." In view of the extreme infrequency of this disease in New York, and its entire absence in most cities of the United States, together with the well-known prevalence of the disease in cities not distant from Bristol, there may be some question as to the source of contagion as stated above.

CALCUTTA.—The report of Surgeon-Major K. McLeod for the month of August gives a total of 583 births, being at an annual rate of 16.3 per 1,000. The deaths in the same period were 825; annual rate 23 per 1,000. Among the causes of death were: Cholera, 22; small-pox, 3; fevers, 295; diarrhœa, 67; accidents and injuries, 15.

DEMERARA.—United States Consul P. Figyelmesy sends reports for the city of Georgetown. In June the deaths were from, diarrhœa and dysentery, 13; malarial fever, 1; other fevers, 3; consumption, 18; diseases of nervous system, 28; of the heart, 10; of the lungs, 11; old age, 14; accidents, 6; suicide, 2. Total number of deaths, 159; population in 1871 was 34,819; on this basis the annual death-rate is 55.5 per 1,000, but this is probably too high, as no allowance is made for increase of population. In July the deaths were from diarrhœa and dysentery, 14; malarial fevers, 3; leprosy, 1; consumption, 13; other lung diseases, 8; diseases of nervous system, 18; of the heart, 11; old age, 2; accidents, 3; suicide, 1. Total number of deaths 135, being at an annual rate of 47.1 per 1,000.

FOOCHOW, CHINA.—The report of United States Consul J. C. A. Wingate, from August 21 to September 11, state that no epidemic disease has been reported during that time. Drainage and sanitary condition of the native city continue bad, as before.

GHENT, BELGIUM.—United States Consul S. Spackman reports for the month of September, one death from small-pox, 16 from typhoid fever, and 4 from scarlet fever. Among other causes were consumption 40, bronchitis 15, heart diseases 22, diarrhœa 156, chiefly among children. Total number of deaths 333; population 130,671; annual death-rate 31 per 1,000.

GUADALOUPE.—United States Consul S. Colardeau, under date of September 11, reports one death from yellow fever at Point à Pitre, from a French bark, which has been lying for some time in the harbor, waiting for a shipment of coolies returning to their native country. In a note of September 18, it is stated that the great prevalence of malarial fevers has induced the authorities to consider the subject of draining the swamps near the city, but this will probably not be soon accomplished. No fatal case of yellow fever has occurred at Point à Pitre, but cases are reported from Basseterre and other places. The exemption of the American shipping from the fever is ascribed in part to the short stay of the vessels in port.

GUAYMAS, MEXICO.—United States Consul A. Willard, in sending his report for the month of September, observes that the death of only one American citizen is noted for the month, and that was not from any contagious or climatic disease. The death-rate among children has been high, but no epidemic disease has prevailed. The report gives 23 deaths in a population of 5,000; death rate 56 per 1,000. Mean temperature 88. Of the 23 deaths, only 4 were of adults.

HONOLULU.—United States Consul F. P. Hastings reports for the month of September a total of 41 deaths, of which 3 were under 5 years of age. Of the decedents 33 were Hawaiians, 4 Chinese, 2 British, 1 Italian, and 1 American. Among the causes of death were: Consumption 7, heart-disease 4, dysentery 1, paralysis 3, dropsy 3, puerperal 1, old age 2, and suicide 1. Medical attendance was wanting in 24 cases.

JAPAN.—The report from Yokohama for the month of September shows no deaths from contagious diseases. There were 146 deaths registered, but the causes are not given.

MALTA AND GOZO.—The Government Gazette reports for the two weeks ending September 30, a total of 177 deaths, of which 107 were

under 5 years of age. Among the causes of death were small-pox 1, croup 3, typhoid fever 1, diarrhœal diseases 38, consumption 7, other lung diseases 15, of the nervous system 15, of the heart 12, puerperal 1, old age 5, accident 1. Population, 154,830; annual death-rate, 29.8 per 1,000.

MATAMOROS, MEXICO.—United States Consul W. P. Sutton sends reports for two weeks, ending October 23. During this time it is estimated that there were 200 cases of small-pox, of which 6 died. There were 23 deaths from "other contagious diseases," and the general sanitary condition is reported as bad.

MILAN, ITALY.—United States Consul Dunham J. Crain, under date of October 9, gives the following account of disease among the agricultural inhabitants of certain parts of Italy:

Under the direction of the Italian Society of Hygiene, aided by the government, a careful investigation was made in 1879 into the causes of the steady and alarming increase of *pellagra*, a disease afflicting the laboring classes. The disease attacks the skin, brain, and muscles, destroying the powers of the body and transmitting its germs to the offspring. The report of the committee of investigation as to the extent and causes of the disease is now published.

In the year 1839 there were in Lombardy 20,282 persons having *pellagra*. The total population of the infected communes was in that year 1,446,702, which gives a proportion of 14 afflicted to each 1,000 of inhabitants. In 1856 the disease had spread to other communes of the province, so that the proportion rose to 15.7 per 1,000. In 1879 out of a total population of 26,301,154 there were 9,640,516 engaged in agriculture, or nearly 36 per cent. Of this number 97,355 were found affected with *pellagra*, or 101.5 out of every 1,000 of total population. In the afflicted provinces the area planted in Indian corn was 17.28 per cent. of the total area. The average daily wages of the agricultural laborers was $0.26\frac{1}{6}$. The proportion of such laborers, who are affected with *pellagra* to the whole agricultural population, is 159.9 per 1,000. This disease, which was unknown to the ancients, has during the last century spread over a large portion of Europe, but prevails more especially in the northern and central provinces of Italy, where it has become permanent, assuming the character of an endemic disease.

It is stated that its first appearance was in the dukedom of Milan in the year 1770. The number of suicides caused by *pellagra* in 1874, in the northern and central provinces, was 145. The effects of the disease are shown in the military levies of the years 1878 and 1879, when, in the province of Lombardy, 20 per cent. were rejected for physical incapacity, while in the provinces where *pellagra* does not exist there were but 10 per cent. rejected.

In the *pellagra* districts the laborers live on Indian corn or maize, using no meat and few vegetables. The maize is crudely prepared in the form known as *polenta*, being rarely well cooked or salted. This restricted diet is the result of poverty, and is the generally-assigned cause of the disease; their houses are also poor.

To lessen the evils, the following measures are proposed: The amelioration of the condition of the laborers; the improvement of their habitations; diffusion of hygienic precepts; a variety of food; use of wine; prohibition of marriage among the afflicted; the letting by landed proprietors of garden-plots to laborers; the propagation of the rabbit, as affording cheap fresh food; the purification of drinking water; and an increase of wages.

While the above recommendations are good, they do not aim at the root of the evil, which is *over-population*. Measures for the encouragement of emigration from the crowded districts can alone relieve their agricultural population.

MOSCOW, RUSSIA.—United States Consul A. Weber reports for the month of August, 1,961 deaths, in an estimated population of 700,000; on this basis, the annual death-rate would be 47.1 per 1,000.

NINGPO, CHINA.—United States Consul E. C. Lord, in his reports for the two weeks ending September 18, states that malarial fevers, diarrhœa, and dysentery, are the prevailing diseases, and the summer having been more cool and damp than usual these diseases are more common than in former years.

PARA, BRAZIL.—The report of United States Consul A. C. Prindle for the month of September shows 3 deaths from yellow fever, 1 from typhus, and 1 from typhoid fever. The total for the month was 134 in a population of 40,000; annual death-rate, 55.8 per 1,000. Malarial fevers are prevalent, but no contagious disease is epidemic.

PORT AU PRINCE, HAYTI.—United States Consul John B. Terres, under date of October 22, reports that the American brig *William Robertson*, of Boston, arrived from Wilmington, N. C., on the 17th with a cargo of lumber. The crew was composed of four Chinese seamen. Three of these were sick on arrival and were placed in the hospital, where one of them died on the 19th and another on the 20th. The physicians certify the cause of death in both cases to have been gastric fever, from alcoholism. The brig will probably proceed next week to some port of Hayti to load with logwood for New York. The health of the port and shipping, excepting the above cases, is excellent.

SABANILLA, UNITED STATES OF COLOMBIA.—United States Consul W. W. Randall reports, under date of October 21, that there were at that time no cases at Baranquilla of yellow fever, small-pox, or cholera.

SINGAPORE.—United States Consul A. G. Studer reports, under date of September 18, that his district continues free from infectious or contagious diseases.

TURKS ISLAND, WEST INDIES.—United States Vice-Consul J. W. Darrell, in his report of September 25, announces the death of United States Consul Francis P. Van Wyck, who died on the 24th of remittent fever, after an illness of only three days.

YORK, ENGLAND.—The report of S. W. North, health officer, for the quarter ending September 30, gives a total of 430 births and 355 deaths. Of the latter, 7 were from scarlet fever, one from diphtheria, 5 from whooping cough, 5 from typhus and typhoid fevers, 24 from consumption, and 22 from other lung diseases. Of the decedents, 210 were under 5 years of age, and 60 were over 60 years. Birth rate, 36.7; death-rate, 30.3.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

HAVANA, CUBA.—During the week ending October 29, there were 15 deaths from yellow fever, of which 9 were among citizens and 6 in the military hospital. For the same period, 11 deaths from small-pox are reported, and the disease seems to be on the increase. The following vessels are believed to have had yellow fever on board while in port: Spanish bark *Antonia*, for New Orleans; Spanish bark Concepcion, for Savannah, and Spanish brig *Nueva Suber*. During the month of October there were 63 deaths from yellow fever, and 5 deaths during the week ending November 5. The number of cases has diminished rapidly since the end of October, and November 6 it was estimated that there were not more than 20 cases in the city.

The following vessels, clearing for ports in the United States, have had yellow fever on board while in port: Spanish brigs *Lorenzo* and *Joven Ana* and the Spanish barkentine Amazona, all for Charleston, S. C.; also, the American bark *R. A. Allen*, for Philadelphia.

Small-pox is increasing, and 16 deaths from it are reported for the week ending November 6.

KEY WEST, FLA.—A dispatch, dated November 9, states that from November 3 to November 8 ten cases of yellow fever and two deaths had been reported. Another dispatch of the same date, forwarded by Supervising Surgeon-General John B. Hamilton, of the United States Marine Hospital Service, states that another death had occurred on the night of the 8th, and that there were several cases outside of the city limits, which had not been previously reported.

NAVASOTA, TEX.—Dr. A. R. Kilpatrick sends the following reports of mortality: In September there were 8 deaths, 4 white and 4 colored. Of the whites, 1 was under five years, and died of marasmus; the deaths of the adults were, from consumption 1, congestion of the brain 1, and injury 1. Of the colored, 3 were under 8 years, one dying of malarial fever, one of "congestion," and an infant from inanition; the only adult died of dropsy.

The highest temperature was 94°, on the 1st; lowest 56°, on the 27th and 28th. Rain fell on 12 days, usually attended with thunder storms, but little wind, except on the 25th and 26th, when the wind was high, but did no damage.

In October, among the whites, one man died of miasmatic hæmaturia, and one still-birth occurred. Among the colored there were 5 deaths, one at 8 years from meningitis; of adults, one from consumption, two from diarrhœa, and one from congestion of the brain.

Highest temperature 90°, on the 12th; lowest 40°, on the 23d. Light rains fell on 4 days. The first frost was on the 16th. There was more than the usual amount of sickness during the two months. Some cases of *dengue* occurred, and pernicious fevers, with severe gastric congestion and black vomit, which proved fatal. The deaths from consumption are mostly among the colored people, and the disease is more common among them since the war, owing to their improvident habits and neglect to secure early medical attendance.

WACO, TEX.—Dr. H. W. Brown, under date of November 3, states that the health of the city and vicinity has been good during the summer, but now diarrhœa and dysentery prevail, and malarial fevers are increasing. These fevers have presented some unusual symptoms in the form of neuralgic pains, fugitive in some cases, but in others equal to those of *dengue*. The reports of mortality, being made from the list of *burials*, include many whose remains are brought from a distance, or from the surrounding country, and do not properly represent the death-rate of the city.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 30, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	FEVER. Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Portland	34,000	1	5	7.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bangor	16,780	.....	1	3.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H. ..... Concord	14,000	.....	3	11.1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Vt ..... Burlington	16,500	1	3	9.5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	48	144	20.0	22	4	8	13	8	1	1	.....	13	1	2	.....	.....	41	5
Cambridge	52,800	6	18	16.4	7	.....	.....	1	.....	.....	.....	.....	2	.....	1	.....	.....	2	1
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,268	.....	5	9.6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Newburyport	13,800	1	4	14.9	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Marblehead	7,285	2	6	41.9	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	.....	1	13.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,148	.....	2	14.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	18	24	25.6	2	5	1	.....	1	.....	1	.....	2	1	.....	.....	.....	.....	.....
Lowell	59,340	10	21	18.4	8	2	.....	.....	1	.....	1	.....	4	.....	.....	.....	.....	4	1
Lawrence	39,000	6	15	20.1	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,000	7	27	24.1	5	.....	.....	.....	2	.....	3	.....	3	1	.....	.....	.....	.....	2
Lynn	38,400	2	14	19.1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockton	13,598	2	6	22.5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	4	6	14.3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,640	.....	1	14.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,200	1	2	11.3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	1	4	19.2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	.....	3	12.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	4	9	18.8	5	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	3	.....
Springfield	33,000	3	8	12.6	.....	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....
R. I. ..... Providence	104,862	5	36	17.9	10	1	2	1	1	.....	5	.....	4	.....	.....	.....	.....	10	2
Conn .... New Haven	63,000	10	17	13.9	1	1	.....	1	.....	2	.....	.....	1	.....	.....	.....	1	5	.....
Waterbury	20,300	1	5	12.9	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,203,823	227	544	23.4	71	25	31	43	4	9	15	.....	89	.....	4	.....	7	158	21
Brooklyn	566,689	108	279	25.8	36	19	9	46	4	5	3	.....	37	.....	5	.....	1	94	11
Yonkers	19,000	3	4	10.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Poughkeepsie	20,200	1	3	7.8	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Newburg	18,043	1	3	8.7	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buffalo	155,159	20	49	16.4	10	3	2	10	3	.....	2	.....	3	.....	.....	.....	.....	.....	3
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	1	2	17.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
Dunkirk	8,000	.....	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarrytown	3,276	1	3	47.7	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	26	84	21.0	19	4	2	.....	.....	1	.....	.....	6	.....	8	.....	.....	9	4
Newark	138,000	27	58	22.2	13	4	.....	.....	1	3	.....	.....	11	.....	.....	.....	.....	6	1
Orange	13,200	.....	2	8.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden	41,714	6	15	18.8	3	.....	2	.....	.....	.....	.....	.....	1	.....	.....	3	.....	3	.....
Plainfield	8,126	.....	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	850,000	82	300	18.3	55	8	2	11	9	.....	3	.....	16	.....	.....	10	1	.....	.....
Pittsburgh	156,649	24	59	19.4	6	1	1	9	6	.....	9	.....	4	1	.....	.....	1	25	3
Erie	28,568	2	9	16.7	2	.....	.....	1	.....	.....	.....	.....	1	.....	1	.....	.....	2	.....
Del ..... Wilmington	44,000	7	18	22.1	3	1	.....	1	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	393,796	74	158	20.9	21	7	4	10	3	2	12	.....	6	.....	2	.....	5	47	6
District of Columbia	180,000	23	79	22.8	25	3	.....	8	3	3	.....	.....	3	.....	.....	.....	.....	20	3
Va ..... Norfolk	26,200	5	16	32.3	1	.....	.....	.....	.....	3	.....	.....	1	.....	.....	.....	.....	5	.....
Richmond	64,670	21	36	29.2	6	.....	2	.....	.....	1	.....	.....	2	.....	.....	.....	3	6	.....
Lynchburg	16,500	2	4	12.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
N. C ..... Wilmington	17,600	4	8	23.8	.....	.....	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	55,000	8	28	25.5	2	.....	2	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	4	12	19.6	.....	1	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Atlanta	38,000	4	12	16.2	1	2	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Rome	5,000	1	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	.....	3	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	4	16	20.8	1	.....	5	.....	.....	.....	.....	.....	2	.....	1	.....	.....	5	.....
Selma	7,505	1	3	20.9	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Miss .... Columbus	5,250	2	3	29.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Vicksburg	12,500	2	6	25.0	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	37	115	27.7	21	3	8	5	1	6	2	.....	7	.....	.....	.....	.....	1	2
Shreveport	8,033	5	8	52.2	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	1	.....	.....
Morgan City	2,018	.....	1	25.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	3	7	50.8	1	.....	1	.....	1	2	.....	.....	.....	.....	.....	.....	1	3	.....
Tex ..... Austin	16,000	1	2	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waco	8,000	.....	5	32.6	.....	.....	.....	.....	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	2	4	9.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Tenn .... Nashville	43,543	3	20	23.5	3	.....	.....	.....	2	1	1	.....	3	.....	.....	.....	.....	4	.....
Clarksville	7,250	.....	2	14.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Memphis	34,000	8	18	27.6	1	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	7	35	10.4	4	1	.....	.....	1	.....	1	.....	2	.....	1	.....	.....	4	2
Ohio .... Cincinnati	280,000	28	78	14.5	11	3	1	4	.....	1	1	.....	7	.....	.....	.....	1	17	3
Cleveland	175,000	.....	60	17.9	4	6	5	9	.....	1	1	.....	1	.....	.....	.....	1	.....	.....
Gallipolis	4,500	.....	4	44.4	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Dayton	39,000	3	6	8.0	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Portsmouth	11,320	1	3	13.8	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	7	23	15.7	5	.....	4	3	1	.....	.....	.....	1	.....	.....	.....	.....	7	2
Richmond	13,000	.....	2	8.2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Evansville	30,000	.....	6	10.5	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1
Ill ..... Chicago	503,298	98	173	17.9	25	15	5	29	6	3	3	.....	16	1	2	1	2	74	4
Peoria	34,850	2	8	11.9	2	.....	.....	3	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Aurora	12,059	.....	2	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Jacksonville	15,000	.....	1	3.5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,200	1	3	19.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Elgin	8,700	1	2	12.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	116,000	27	48	21.5	4	3	1	7	.....	4	.....	.....	6	.....	.....	.....	.....	15	3
Beloit	5,100	.....	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn .... Saint Paul	41,800	5	10	12.5	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mich ... East Saginaw	19,065	3	5	13.8	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Flint	9,000	.....	1	5.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Lansing	10,000	.....	1	5.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa .... Keokuk	12,125	2	3	13.0	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING OCTOBER 30, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrheal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Davenport	23,000	2	7	15.9	1	2	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	4	.....
Mo .....Saint Louis	333,577	48	129	18.8	20	4	6	4	7	7	.....	.....	2	.....	.....	.....	.....	38	2
Nebr ....Omaha	31,000	2	8	13.8	.....	.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Kans ....Lawrence	8,500	1	3	18.0	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Colo .....Boulder	3,030	1	2	34.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	4	12	25.0	1	1	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
Cal .....San Francisco	233,700	26	87	19.4	20	.....	9	2	1	1	.....	.....	11	.....	.....	.....	.....	8	2
Sacramento	21,500	7	12	29.1	.....	.....	4	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	1	3	14.4	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Totals	8,088,892	1,160	3,121	20.1	490	135	132	238	70	67	71	.....	293	5	34	14	35	629	94

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING OCTOBER 23, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death rate per 1,000. White.	Annual death rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	141	3	19.9	31.0
R. I .....Providence	101,062	3,800	35	1	18.1	13.7
Del .....Wilmington	38,000	6,000	14	4	15.5	34.8
Md .....Baltimore	338,384	55,412	123	35	19.0	33.1
District of Columbia	120,000	60,000	38	41	16.5	35.5
Va.....Norfolk	14,900	11,300	9	7	33.6	32.3
Richmond	37,970	26,697	14	22	15.5	23.6
S. C .....Charleston	25,000	32,000	8	20	16.6	32.5
Ga.....Augusta	16,182	10,380	7	5	22.8	23.4
Atlanta	22,000	16,000	9	3	21.3	9.8
Ala .....Mobile	28,000	12,000	6	10	11.2	43.5
Selma	3,425	4,080	1	2	15.2	25.6
Fla .....Jacksonville	6,000	4,000	3	.....	25.1	.....
Miss .... Columbus	2,760	2,490	1	2	19.5	40.7
La .....New Orleans	159,128	57,231	89	26	29.1	23.7
Shreveport	3,916	4,117	2	7	26.7	89.3
Baton Rouge	2,954	4,233	3	4	53.0	49.3
Tenn ....Nashville	27,874	15,669	10	10	18.3	33.0
Clarksville	4,000	3,250	1	1	13.0	16.0
Memphis	17,293	16,707	7	11	21.1	34.4
Tex.....Austin	12,000	4,000	1	1	4.3	13.0
Waco	5,000	3,000	4	1	41.7	17.2
Ky .....Louisville	153,125	21,875	33	2	11.3	4.9
Ohio.....Portsmouth	10,320	1,000	3	.....	15.2	.....
Kans ....Lawrence	6,800	1,700	3	1	23.0	30.7
Totals	1,526,093	381,941	565	219	19.3	30.0

The following reports, for the week ending October 30, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; consumption 2, lung disease 1, accident 1. Allegheny, Pa., 78,000; deaths, 15; under 5 years, 4; consumption 1, croup 2, scarlet fever 4, puerperal 1. Brattleboro', Vt., 6,000; no deaths. Brownsville, Tex., 5,800; deaths, 5; under 5 years, 2; diarrhœa 1, whooping-cough 3. Bucyrus, Ohio, 3,950; death, 1; lung disease 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 2; consumption 1. Circleville, Ohio, 6,400; deaths, 3; accident 1, old age 2. Clinton, Mich., 1,200; deaths, 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,300; deaths, 7; under 5 years, 1; diarrhœa 2, malarial fever 1, lung disease 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Helena, Mont., 3,630; deaths, 2; consumption 1, lung disease 1. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., 1,200; no deaths. Iuka, Miss., 816; one death; lung disease 1. Jefferson, Tex., 3,251; no deaths. Lebanon, Pa., 9,000; no deaths. Louisiana, Mo., 5,200; deaths, 3; under 5 years, 1; consumption 1, measles 1. Martinsburg, W. Va., 6,344; deaths, 2; consumption 1. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; deaths, 5; under 5 years, 1; consumption 2. Monmouth, Ill., 6,000; deaths, 3; consumption 1, croup 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,412; no deaths. Muskegon, Mich., 11,300; deaths, 2; malarial fever 1. Niles, Mich., 4,200; no deaths. Painesville, Ohio, 5,504; deaths, 1; enteric fever 1. Pass Christian, Miss., 2,000; deaths, 1; enteric fever 1. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 2. Pleasant Hill, Miss., 252; no deaths. Plymouth, Mich., 3,000; no deaths. Port Gibson, Miss., 1,200; deaths, 2; under 5 years, 1. Ripley, Miss., 1,000; deaths, 1; under 5 years, 1; whooping-cough 1. Rock Island, Ill., 12,000; deaths, 4; enteric fever 1. Rockland, Me., 7,500; deaths, 5; consumption 1, diarrhœa 1. Shelbyville, Tenn., 1,919; deaths, 1; consumption 1. Springfield, Ohio, 21,000; deaths, 11; under 5 years, 5; consumption 3, diphtheria 1. Starkville, Miss., 1,454; death, 1; lung disease 1. Steubenville, Ohio, 13,500; deaths, 5; under 5 years, 4. Summit, Miss., 1,808; deaths, 2; enteric fever 1, measles 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 1. Tuscaloosa, Ala., 2,000; no deaths. Winchester, Va., 5,000; deaths, 3; consumption 1, diphtheria 1. Winona, Minn., 10,000; death, 1; malarial fever 1. Youngstown, Ohio, 15,089; deaths, 2; under 5 years, 1; croup 1. Total population, 331,581; deaths under 5 years, 22; total number of deaths, 99; annual rate per 1,000, 15.6.

THE INTERNATIONAL SANITARY CONVENTION.

The Hon. Secretary of State forwards to the National Board of Health a letter dated at Tangier, Morocco, October 5, from United States Consul Felix A. Mathews, which concludes as follows:

In compliance with your request, I called the attention of the Moorish Government to the proposed conference. The Moorish minister for foreign affairs replied, that as the sanitary matters of Morocco were in the hands of the foreign representatives at Tangier, that body, acting as the board of health, will undoubtedly adhere to whatever measures the International Sanitary Conference may adopt.

As president of the Morocco board of health, I consulted the members of the board, who coincide with the views expressed by the Moorish minister for foreign affairs, the funds of the board being insufficient to appoint a delegate to attend the proposed conference.

JAPAN.—Under date of October 8, Dr. T. H. Streets, of the United States naval hospital at Yokohama, states that the general health of the country has been good during the past summer. The cholera, which had raged with more or less virulence in the Empire for three years, suddenly disappeared at the close of 1879. It is difficult to say how far this may have been due to the rigid sanitary measures of the government, or how far to other causes.

SANTA CRUZ, TENERIFFE.—United States Consul W. H. Dabney reports, for the month of September, 33 births and 38 deaths; of the latter 28 were under 5 years of age, and 3 over 70. Among the causes of death were: consumption 2, other lung diseases 2, diarrhœal diseases 6, typhoid fever 2, violence 2, old age 3.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	100	1	..	2	7	..	..	..	..	..	..	..	..	..	..	..	..	6	1	1	2	5	7	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60	50	6	104
Emigrant Hospital	New York, N. Y	do	462	276	5	4	3	6	..	..	..	..	1	13	6	5	..	..	..	1	2	3	3	..	74	84	..	13	3	..	1	3	4	3	3	1	10	6	..	14	..	..	..	..	..	..	..	..	343	303	20	286
German Hospital	do	do	90	77	3	3	1	1	..	..	..	..	3	4	..	1	..	..	..	..	4	2	..	4	13	17	..	6	..	..	..	..	2	1	..	2	..	..	..	..	..	..	..	..	..	..	81	82	5	72
Hart's Island Hospital	Hart's Island, N. Y	do	300	221	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	46	46	..	217
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	4
Rochester City Hospital	Rochester, N. Y	do	125	78	2	2	1	6	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..	2	2	1	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	44	36	6	73
Saint Mary's Hospital	do	do	320	227	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	4	4	..	6	..	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	32	34	3	224
Saint Barnabas Hospital	Newark, N. J	do	45	25	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	6	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	8	..	21
Saint Michael's Hospital	do	do	140	135	14	4	6	13	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	1	17	13	..	12	..	..	..	..	3	1	..	3	..	..	..	..	..	..	..	..	..	..	100	76	13	146
Germantown Hospital	Germantown, Pa	do	25	20	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	1	6	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	14	18	1	15
Freedmen's Hospital	Washington, D. C	do	300	245	3	..	1	..	..	..	..	..	3	..	1	..	..	..	..	..	1	..	..	..	23	..	..	..	..	..	..	..	4	..	..	..	..	..	..	4	..	..	..	..	..	..	89	87	10	237
Providence Hospital	do	do	160	112	3	10	2	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	27	1	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	102	101	7	105
Georgia Infirmary	Savannah, Ga	do	50	35	1	1	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	6	2	1	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	14	5	31
Saint Luke's Hospital	Detroit, Mich	do	25	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	13
Saint Louis Hospital	Saint Louis, Mo	do	250	68	6	1	1	7	..	..	..	..	7	9	..	4	..	..	..	..	..	..	..	..	44	41	..	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	86	79	3	73
Naval Hospital	Chelsea, Mass	do	100	15	..	..	..	2	..	..	..	..	..	2	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	11
Do	Brooklyn, N. Y	do	115	35	4	..	1	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	2	..	..	5	..	..	..	..	..	..	..	..	..	..	3	..	..	46
Do	Washington, D. C	do	50	10	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	7	..	1	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	..	17	11	..	16
Do	Mare Island, Cal	do	77	22	..	..	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4
Riverside Hospital	New York, N. Y	Contagious diseases	150	11	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	4	4	1	5	2	..	1	1	2	1	..	1	..	1	..	1	..	..	..	..	..	..	..	..	7	1	1	6	17	10	3	15
Women's Hospital of Illinois	Chicago, Ill	Women	19	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	11	1	11
Insane Hospital	Augusta, Me	Insane	400	432	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	14	2	436
State Lunatic Asylum	Worcester, Mass	do	650	535	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	12	7	527
Retreat for Insane	Hartford, Conn	do	150	142	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	8	3	143
Hospital for Insane	Middletown, Conn	do	515	519	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	26	17	2	528
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1256	1300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	30	5	1298
Marshall Infirmary	Troy, N. Y	do	200	150	2	..	2	3	..	..	..	..	..	..	..	1	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	16	8	17	48	31	14	150
Willard Asylum	Willard, N. Y	do	1504	1626	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	5	4	1635
State Hospital for Insane	Danville, Pa	do	700	384	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	8	2	389
West Pennsylvania Hospital for Insane	Dixmont, Pa	do	579	597	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	13	4	597
Eastern Lunatic Asylum	Williamsburg, Va	do	330	333	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	6	3	7	329
North Carolina Insane Asylum	Raleigh, N. C	do	283	278	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	8	3	277
Alabama Insane Asylum	Tuscaloosa, Ala	do	406	402	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	11	2	402
Minnesota Hospital for Insane	Saint Peter, Minn	do	668	666	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	26	4	656
Insane Asylum of California	Stockton, Cal	do	1117	1112	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	7	5	1110

REPORT OF QUARANTINE INSPECTIONS AND OPERATIONS FOR MONTH ENDING OCTOBER 31, 1880

ARRIVED DURING THE MONTH.

Station.	Name of vessel.	Description of vessel.	Name of commander.	Where from.	Days of passage.	Date of arrival.	No. of crew.	No. of passengers.	Cargo.	Bill of health.	Sanitary condition of vessel.	Disposition of vessel, and remarks.
Norfolk Va	Edith	Brig		Wilmington, N. C	18	Oct. 4	7		Lumber	None	Fair	Put in; four of crew sick with malarial fever.
Charleston, S. C	Albatross	Norwegian bark		Rio de Janeiro	53				Stone ballast	Clean		Quarantined; lost one man with yellow fever before leaving Rio.
Pensacola, Fla	Albert H. Waite	Schooner	J. D. Dodge	Matanzas	7	Oct. 3	7		None	do	Good	Admitted to pratique October 6.
Do	H. T. Morse	do	J. W. Hawley	do	6	Oct. 4	8		do	do	do	Admitted to pratique October 7.
Do	Kitty	Bark	P. G. Isaachsen	Amsterdam	61	Oct. 4	19		Ballast	do	do	Admitted to pratique October 4.
Do	Obi	do	A. G. Rynsaardt	do	60	Oct. 4	19		do	None	do	Do.
Do	Destino	do	A. Mosso	Cape de Verde	35	Oct. 5	13		do	Clean	do	Admitted to pratique October 9.
Do	Tomasito	do	J. D. Egunola	Havana	10	Oct. 11	10		do	Not clean	Bad	Quarantined; released October 20.
Do	Asiana	Ship	D. Williams	Rio	54	Oct. 13	22		do	do	Good	Do
Do	Fratella Doje	Bark	T. Breci	Cape Town	71	Oct. 13	14		do	None	do	Quarantined; released October 18.
Do	Prince Rupert	do	R. J. Robinson	Havana	8	Oct. 16	21		do	Not clean	do	Quarantined; released October 25.
Do	Maria Elisa	Brig	Louis Vidal	do	4	Oct. 16	9		do	do	Passable	Quarantined; released October 22.
Do	Perseverance	Bark	A. Morice	Rio de Janeiro	45	Oct. 18	22		do	do	Fair	Quarantined.
Do	Constancia	do	J. Echevavia	Matanzas	6	Oct. 22	12	1	do	do	Good	Quarantined; released October 31.
Do	J. Basilio	Brig	John Gonzalez	Havana	12	Oct. 25	10		do	do	do	Ballast taken out, fumigated, &c.; released October 29.
Do	Emelie	do	Jos. Abad	Matanzas	14	Oct. 26	9		do	Clean	Passable	Do.
Do	Busy	Bark	A. F. Ulmer	Trinidad	10	Oct. 26	10		do	do	do	Ballast taken out, fumigated, &c.; released October 30.
Do	Hancock	Barkentine	O. W. Jenkins	Kingston	11	Oct. 27	9		do	do	Good	Do.
Do	James R. Talbot	Schooner	E. H. Crocker	do	15	Oct. 27	7	2	do	do	do	Do.
Mobile, Ala	Matilde	Bark	M. Clark	Havana	7	Oct. 11	10		do	Foul	Bad	Quarantined; discharged October 26.
Do	John McAdam	Schooner	V. Lyles	Matanzas	5	Oct. 13	7		None	Clean	Good	Had dead body of mate on board; discharged October 19.
Do	Grafottozusolms	Barkentine	Vick	do	11	Oct. 25	7		Ballast	do	do	Quarantined; discharged November 2.
Ship Island, Miss	Carlos	Spanish brig	A. Caballeira	Havana	8	Oct. 4	9		Earth ballast	do	Fair	Detained for observation; discharged October 10.
Do	Sandusky	Ship	R. J. Lowden	New Orleans		Oct. 14					do	Towed in, empty and without crew.

REMAINING IN QUARANTINE AT DATE OF LAST REPORT.

Station.	Name of vessel.	Description of vessel.	Date when placed in quarantine.	Disposition of vessel, and remarks.
Pensacola, Fla	Perseverance	Bark	October 18	Undergoing fumigation, &c.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	Oct. 24	1	10.4													55.0
Canada	Kingston	15,000	Oct. 30	3	9.8													35.1
Do	Montreal	135,000	Oct. 23	58	34.0								1				3	43.2
Do	...do	135,000	Oct. 30	58	34.0								1				1	33.5
Bahamas	Nassau, N. P	13,000	Oct. 23															80.0
Cuba	Havana	195,437	Oct. 23	159	42.5				14		10		2					81.0
Hayti	Port-au-Prince	30,000	Oct. 13	8	13.9													91.0
Do	...do	30,000	Oct. 20	27	47.0													92.0
Do	Aux Cayes	9,000	Oct. 9	10	58.0													80.0
Do	...do	9,000	Oct. 16	4	23.2													80.0
Trinidad	Spain	30,000	July 10	42	73.0													
Do	...do	30,000	July 17	38	66.1													
Do	...do	30,000	July 24	19	33.5													
Do	...do	30,000	July 31	24	41.7													
Do	...do	30,000	Aug.	13	22.6													
Do	...do	30,000	Aug.	13	22.6													
Do	...do	30,000	Aug. 21	24	41.7													
Do	...do	30,000	Aug. 28	22	38.2													
Do	...do	30,000	Sept. 4	18	31.2													
St. Christopher	Basseterre	12,000	July 5	3	13.0													86.0
Do	...do	12,000	July 12	4	17.4													86.0
Do	...do	12,000	July 19	4	17.4													85.0
Do	...do	12,000	July 26	5	21.7													85.0
Do	...do	12,000	Aug. 2	3	13.0													85.0
Do	...do	12,000	Aug. 9	5	21.7												1	86.0
Do	...do	12,000	Aug. 16	1	4.3													87.0
Do	...do	12,000	Aug. 23	2	8.7													87.0
Do	...do	12,000	Aug. 30	10	43.4													86.0
Aspinwall	Colon	2,500	Oct. 16	5	104.5						1							85.0
Do	...do	2,500	Oct. 23	8	167.1													85.0
Mexico	Acapulco	3,500	Oct. 2	4	59.6													85.0
Do	...do	3,500	Oct. 9	5	74.6													82.0
Do	Matamoras	16,000	Oct. 16	14	45.6					100	3							
Do	...do	16,000	Oct. 23	15	48.9					100	3							
St. Helena	Jamestown		Oct. 9	1	8.4													70.5
Ireland	Queenstown	10,000	Oct. 23	7	36.5													
Do	Belfast	230,000	Oct. 16	96	27.4							17	5					50.1
Do	Dublin	314,666	Oct. 16	199	32.9						4		7		3		24	47.8
Scotland	Dundee	155,000	Oct. 16	67	22.5							12				8		47.8
Do	Glasgow	589,598	Oct. 16	236	21.9								38				12	30.6
Do	Leith	58,479	Oct. 23	29	25.8													40.4
England	London	3,254,260	Oct. 16	1,405	20.0						6		22				115	48.0
Do	Tunstall	27,775	Oct. 23	15	24.5													45.2
Do	Bristol and Clifton	213,560	Oct. 16	74	18.1								2				7	47.9
Do	Leeds	318,929	Oct. 16	133	21.8								6					48.4
Do	Bradford		Oct. 9	87	23.0												6	
Do	Liverpool	544,056	Oct. 23	315	17.1					1		6	3	28	1	53	38	42.0
Wales	Cardiff	82,364	Oct. 23	31	19.5													45.5
France	Paris	1,988,806	Oct. 21	914	24.0						17		27				107	
Do	Lyons	342,815	Oct. 3	166	25.3						4		9				2	
Do	...do	342,815	Oct. 9	158	24.0						5		15				3	
Do	...do	342,815	Oct. 16	130	19.8						3		5				6	
Do	Rouen	104,209	Oct. 23	44	21.9													
Switzerland	Zurich	22,103	Oct. 16	6	14.2												1	
Holland	Rotterdam	150,378	Oct. 23	62	21.5							1				31	1	
Germany	Berlin	1,096,644	Oct. 9	616	29.2							95	21	1		163	96	58.0
Do	Breslau	276,000	Oct. 9	130	24.5								2				25	58.0
Do	Brunswick	74,000	Oct. 16	31	21.8												2	
Do	Barmen	95,000	Oct. 16	42	22.1								1				4	50.0
Do	Bremen	109,000	Oct. 9	45	21.5									1	1		4	
Do	Cologne	141,639	Oct. 16	59	21.7								5				9	
Do	Hamburg	400,000	Oct. 2	196	25.6												9	
Do	Mannheim	50,500	Oct. 23	13	13.4													46.0
Saxony	Dresden	220,500	Oct. 9	94	22.2							1	1			18	18	58.0
Do	Leipsic	150,836	Oct. 16	56	19.3												6	47.0
Do	Chemnitz	100,541	Oct. 9	61	24.7								1					
Belgium	Antwerp	173,643	Oct. 9	73	21.9					19	7	37	3			2		
Do	...do	173,643	Oct. 16	87	26.1					33	10	41	4			1		
Denmark	Copenhagen	235,254	Oct. 12	77	17.1							38				7		48.0
Italy	Venice	141,004	Sept. 4	62	22.9						1		1				3	70.8
Do	...do	141,004	Sept. 11	75	27.7						2		2				3	71.7
Do	...do	141,004	Sept. 18	50	18.5								3				4	68.0
Do	...do	141,004	Sept. 25	54	30.0						3		1				5	66.0
Do	...do	141,004	Oct. 2	60	22.2						4		3				5	62.0
Austria	Vienna	746,243	Oct. 16	337	20.4						10		7				13	58.0
Hungary	Buda-Pesth	344,604	Oct. 9	212	32.1						6		6				11	
Russian Poland	Warsaw	357,169	Oct. 9	140	20.5													58.0
Sweden	Stockholm	169,429	Oct. 9	92	28.7								1				21	38.0
Norway	Christiania	116,801	Oct. 9	37	16.5							11	1			10	2	38.0
Spain	Cadiz	65,028	Oct. 16	38	30.5													71.0
Do	Seville	138,000	Oct. 3	74	28.0										5		3	66.0
Do	...do	138,000	Oct. 10	85	32.1										1		3	68.0
Do	...do	138,000	Oct. 16	78	29.5								4				4	70.0
Barbary	Tripoli	20,000	Oct. 9	15	39.1													83.7
Cape Colony	Cape Town	35,000	Oct. 4	21														30.0
Egypt	Alexandria	220,000	Oct. 16	188	44.6													
East India	Calcutta	429,535	Sept. 18	204	24.7		3				1		11				2	81.7
Do	...do	429,535	Sept. 25	189	22.9		2				1		11				1	81.7
China	Shanghai	2,197	Sept. 7	2	52.2													75.6
Do	...do	2,197	Sept. 14	1	26.1													78.3
Do	...do	2,197	Sept. 21	2	52.2	2	1											75.7
Japan	Kobe	18,282	Sept. 18	10	28.6													
Do	...do	12,282	Sept. 25	19	54.2													

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, NOVEMBER 20, 1880. [No. 21.

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 *PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FIVE WEEKS ENDING OCTOBER* 2, 9, 16, 23, *AND* 30, *FROM THE FOLLOWING PLACES.*

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	4.6	15.0
Boston, Mass	8.4	22.4
Edgartown, Mass	.....	8.1
New Bedford, Mass	6.5	19.8
Newburyport, Mass	5.2	17.8
Marblehead, Mass	9.8	25.1
Nantucket, Mass	2.7	27.6
Plymouth, Mass	4.4	20.6
Lowell, Mass	9.8	19.8
Worcester, Mass	6.8	20.4
Lynn, Mass	6.5	18.5
Brockton, Mass	4.3	15.0
Bridgewater, Mass	11.5	43.0
Chicopee, Mass	2.9	9.6
Fitchburgh, Mass	8.3	17.3
Somerville, Mass	6.3	17.5
Springfield, Mass	4.7	17.7
Providence, R. I	4.4	16.7
New Haven, Conn	4.9	13.2
Burlington, Vt	5.7	9.5
New York, N. Y	10.1	24.5
Brooklyn, N. Y	10.6	24.1
Poughkeepsie, N. Y	3.1	10.4
Newburgh, N. Y	5.8	13.3
Buffalo, N. Y	6.7	17.3
Seneca Falls, N. Y	8.7	19.1
Hudson County, N. J	7.8	22.3
Newark, N. J	8.7	20.5
Orange, N. J	6.4	13.6
Camden, N. J	7.5	16.2
Plainfield, N. J	3.9	16.9
Philadelphia, Pa	5.6	17.4
Pittsburgh, Pa	8.3	20.5
Erie, Pa	5.5	13.3
Wilmington, Del	5.9	18.9
Baltimore, Md	8.0	19.5
District of Columbia	9.3	24.5
Norfolk, Va	12.9	31.5
Richmond, Va	13.1	28.1
Lynchburg, Va	6.9	22.7
Wilmington, N. C	14.8	34.5
Charleston, S. C	12.9	28.8
Augusta, Ga	9.7	24.4
Atlanta, Ga	5.9	16.5
Rome, Ga	8.3	20.8
Jacksonville, Fla	6.3	24.0
Mobile, Ala	6.5	17.9
Selma, Ala	8.3	22.2
Vicksburg, Miss	9.2	30.8
New Orleans, La	8.3	25.3
Baton Rouge, La	7.3	30.5
Austin, Tex	4.6	12.1
Nashville, Tenn	4.9	19.3
Clarksville, Tenn	4.3	17.3
Louisville, Ky	3.2	10.7
Gallipolis, Ohio	4.6	16.2
Dayton, Ohio	4.5	13.6
Portsmouth, Ohio	7.4	18.4
Indianapolis, Ind	9.1	18.0
Evansville, Ind	6.2	18.1
Peoria, Ill	5.1	15.5
Aurora, Ill	0.9	8.7
Jacksonville, Ill	2.1	7.7
Elgin, Ill	4.7	9.5
Milwaukee, Wis	11.7	21.1
East Saginaw, Mich	4.4	12.6
Keokuk, Iowa	5.2	9.6
Davenport, Iowa	4.1	15.5
Saint Louis, Mo	7.1	16.0
Omaha, Nebr	4.5	12.8
Boulder, Col	13.7	20.6
Salt Lake City, Utah	5.4	16.3
San Francisco, Cal	4.8	17.5
Sacramento, Cal	5.8	19.9
Los Angeles, Cal	8.6	15.3

DIAGRAM SHOWING THE SAME FOR THE MONTH OF OCTOBER, 1880, *FOR THE FOLLOWING PLACES.*

Amsterdam, N. Y	7.5	22.6
Kingston, N. Y	3.8	8.8
Paterson, N. J	11.1	23.5
Scranton, Pa	5.4	9.3
Petersburg, Va	17.5	39.3
Lansing, Mich	1.2	6.0
Chicago, Ill	8.8	18.2
Watertown, Wis	7.2	19.2

DIAGRAM EXHIBITING THE PROPORTION OF DEATHS PER 1,000 PER ANNUM, BY COLOR, AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH, FOR THE FOUR WEEKS ENDING OCTOBER 2, 9, 16, 23, AND 30, 1880, FROM THE FOLLOWING PLACES.

White under 5. Total White. Colored under 5. Total Colored.

	Under 5.		*Total—*	
Boston, Mass	White	8.4	White	22.2
Do	Colored	8.3	Colored	37.5
Providence, R. I.	White	4.3	White	16.8
Do	Colored	2.8	Colored	13.1
Wilmington, Del	White	5.5	White	14.6
Do	Colored	6.9	Colored	20.8
Baltimore, Md	.....	.....	White	17.8
Do	.....	.....	Colored	29.8
Dist. of Columbia	White	6.7	White	19.6
Do	Colored	14.5	Colored	34.0
Norfolk, Va	White	9.3	White	24.2
Do	Colored	17.5	Colored	40.9
Richmond, Va	White	6.8	White	16.4
Do	Colored	19.8	Colored	35.0
Charleston, S. C.	White	5.0	White	20.0
Do	Colored	15.3	Colored	39.6
Augusta, Ga	White	6.4	White	14.9
Do	Colored	21.3	Colored	37.5
Atlanta, Ga	White	3.8	White	16.6
Do	Colored	9.1	Colored	17.0
Jacksonville, Fla.	White	6.9	White	22.4
Do	Colored	10.4	Colored	26.1
Mobile, Ala	White	3.7	White	11.9
Do	Colored	13.0	Colored	32.2
Selma, Ala	White	3.0	White	12.2
Do	Colored	12.8	Colored	30.7
New Orleans, La	White	7.9	White	23.9
Do	Colored	9.5	Colored	29.0
Shreveport, La	White	15.9	White	29.3
Do	Colored	25.3	Colored	58.7
Austin, Tex	White	6.1	White	11.3
Do	Colored	2.6	Colored	15.6
Nashville, Tenn	White	3.4	White	15.4
Do	Colored	8.0	Colored	26.4
Clarksville, Tenn	White	2.6	White	5.2
Do	Colored	6.4	Colored	25.7
Louisville, Ky	White	2.9	White	9.8
Do	Colored	4.8	Colored	17.2

ABSTRACTS FROM CONSULAR REPORTS.

AMOY, CHINA.—United States Consul W. E. Goldsborough reports only two deaths among the foreign population during the month ending September 25. Dysentery and malarial fevers prevail among the native population, as is usual at this season of the year.

FOOCHOW, CHINA.—United States Consul J. A. Wingate reports for the three weeks ending October 2 no epidemic disease in this city, which, including its suburbs, has a population estimated at 1,100,000. The bad sanitary condition of the place has been previously described, and remains unchanged. The climate is good, and the foreigners settled there generally have good health. Mean temperature for September, 80°.

GLASGOW, SCOTLAND.—The report of the medical officer for the second quarter of 1880 gives the following statistics: In April the mean temperature was 45°.5, rainfall 3.67 inches, rain on 22 days, death-rate for all ages 26.6, death-rate under 5 years 93.9, per cent. of deaths under 5 years 49.

In May the mean temperature was 49°.2, rainfall 0.9 inch, rain on 11 days, death-rate for all ages 27.5, under 5 years 89.6, per cent. of deaths under 5 years 45.5.

In June the mean temperature was 55°.4, rainfall 2.25 inches, death-rate for all ages 23.5, under 5 years 73.5, per cent. of deaths under 5 years 44.

The total of deaths from several causes was as follows: Consumption and acute lung diseases 1,210, diseases of nervous system in children under 5 years, and premature births, 487; scarlet fever, measles, whooping-cough, croup, and diphtheria, 471; fevers 122, diarrhœal diseases 55, unclassified 1,139; total from all causes 3,484, giving a mean annual death-rate for the quarter of 26 per 1,000. The birth-rate for the same period was 39 per 1,000.

HOBART TOWN, TASMANIA.—United States Consul A. G. Webster reports for the month of July 68 deaths in a population of 27,500, being at an annual rate of 29.1 per 1,000. Mean temperature, 48°; causes of death not stated.

LONDONDERRY, IRELAND.—United States Consul A. Livermore reports for the week ending October 23 fourteen deaths from typhus fever, which would imply a large number of cases.

MALTA AND GOZO.—United States Consul C. B. Eynaud reports for the two weeks ending October 15 one death from small-pox and 6 from typhoid fever. Deaths from all causes 155, in a population of 154,830, not including 7,000 troops in the garrison. Annual death-rate 26.1 per 1,000. Mean temperature 74°.

MELBOURNE, AUSTRALIA.—United States Consul O. M. Spencer reports 413 deaths in the city and suburbs during the month of August. Population 265,000. Annual death-rate 18.3 per 1,000. Mean temperature 52°.6. Measles the only prevailing contagious disease.

NEW ZEALAND.—The report for the month of July from 15 boroughs, with an aggregate population of 130,225, gives a total of 545 births and 167 deaths. Annual birth-rate, 49.3 per 1,000; annual death-rate, 15.1. In four of the principal boroughs, having a population of 75,720, the following causes of death are noted: Diphtheria 1, croup 1, enteric fever 1, whooping-cough 1, diarrhœa and dysentery 3, cancer 3, consumption 11, diseases of nervous system 8, of the heart 11, of the lungs 20, premature births 10, puerperal 2, old age 2, accident 1. Total number of deaths, 102; annual rate, 15.9 per 1,000. Mean temperature, 47°.

During the month of August there were 514 births and 167 deaths in the 15 boroughs, giving a birth-rate of 46.4, and a death-rate of 15.1 per 1,000 per annum. In the four boroughs there were noted the following causes of death: Diphtheria 1, whooping-cough 7, enteric fever 2, diarrhœa 2, consumption 4, other lung diseases 24, of the nervous system 25, of the heart 9, premature birth 1, puerperal 2, old age 1, accidents 4. Mean temperature, 47°.6.

QUEENSLAND, AUSTRALIA.—In the district of Brisbane, having a population of 33,884, there were, during the month of August, 125 births and 40 deaths registered. Annual birth-rate 43.8; annual death-rate 13.9 per 1,000. The deaths under 5 years were 16, or 40 per cent. of the total; under one year 25 per cent. Among the cases of death were, diseases of the nervous system 4, of the heart 5, of the lungs 5, of the bowels 2, accidents 2. Mean temperature 63°.4; highest 84°.5; lowest 37°.5. Prevailing winds N. E. No rainfall during the month.

SANTA CRUZ, PALMA, CANARIES.—United States Consul F. W. Lavers reports 14 deaths during the month of September, in a population of 6,070, being at an annual rate of 22 per 1,000. No disease prevailing, and sanitary condition good.

SINGAPORE.—United States Consul A. G. Studer reports 273 deaths for the month of August; of these only 4 were Europeans. Among the causes of death were: consumption, 33; other lung diseases, 13; diarrhœa and dysentery, 40; fever, 103; leprosy, 3; dropsy, 19; accidents, 3.

SYDNEY, AUSTRALIA.—The report for the month of August, for the city and suburbs, shows 777 births and 397 deaths. The population of the city is given as 136,483 by the census of 1871, and is, therefore, probably too much in error to serve as the basis of the present death-rate. In the city there were 240 deaths, of which 83 were under 5 years. Among the causes noted were: measles, 5; scarlet fever, 1; diphtheria, 1; croup, 4; whooping-cough, 1; typhoid fever, 7; diarrhœa and dysentery, 4; rheumatism, 3; diseases of the nervous system, 26; of the heart, 19; of the lungs, 32. Mean temperature 55°.5. Rain on 2 days. Rainfall, 0.6 inches.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 6, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	34,000	3	15	23.0	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Bangor	16,780	2	6	18.4	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	.....	4	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	3	5	15.8	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Mass .... Boston	375,000	49	158	22.0	36	7	6	15	8	.....	.....	.....	18	.....	1	.....	1	39	6
Cambridge	52,800	4	15	13.6	3	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,268	3	9	17.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Newburyport	13,800	.....	3	11.1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	2	3	21.0	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,777	.....	2	27.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	14	27	28.8	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowell	59,485	.....	21	18.4	6	.....	1	.....	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Lawrence	39,000	4	9	12.1	3	.....	1	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Worcester	58,000	15	24	21.5	3	.....	.....	1	2	.....	4	.....	2	.....	2	.....	1	.....	2
Lynn	38,400	7	18	24.5	3	.....	.....	.....	3	.....	.....	.....	3	.....	.....	.....	1	.....	1
Brockton	13,598	.....	8	29.9	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....
Holyoke	22,000	2	9	14.2	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Bridgewater	3,645	.....	1	14.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,200	1	9	51.0	2	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Chicopee	11,000	1	3	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	2	6	24.8	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Somerville	25,000	1	4	8.3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Springfield	33,000	8	13	20.6	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
R. I ..... Providence	104,862	6	34	16.9	5	.....	2	.....	2	.....	3	.....	5	.....	1	.....	.....	7	2
Conn .... New Haven	63,000	3	14	11.4	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
New Britain	14,000	.....	2	7.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,300	2	9	23.2	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....
N. Y ..... New York	1,203,823	220	583	25.2	91	30	21	54	12	11	14	.....	96	.....	6	.....	6	168	32
Brooklyn	566,689	102	253	23.4	32	16	3	56	.....	6	2	.....	47	.....	.....	.....	2	94	10
Yonkers	19,000	2	4	11.0	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Poughkeepsie	20,200	.....	8	20.8	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Newburg	18,043	.....	5	14.5	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Utica	34,500	2	20	30.7	7	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Rochester	90,000	6	24	13.9	2	1	1	4	1	.....	1	.....	4	.....	.....	.....	.....	7	1
Buffalo	155,159	19	45	15.0	2	4	2	9	3	.....	.....	.....	3	.....	1	.....	1	10	3
Seneca Falls	6,000	.....	2	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Little Falls	6,910	.....	2	15.1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	11	56	14.0	14	3	.....	3	.....	1	1	.....	4	.....	5	.....	.....	10	4
Newark	138,000	.....	43	16.4	5	8	.....	2	2	.....	.....	.....	4	.....	.....	.....	.....	4	1
Orange	13,206	2	6	24.1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Camden	41,714	3	9	11.3	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2	.....	2	.....
Plainfield	8,000	.....	3	19.6	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	850,000	106	313	19.2	48	10	4	8	14	.....	4	.....	15	.....	.....	22	1	.....	.....
Pittsburgh	156,649	29	62	20.3	9	.....	3	6	2	.....	7	.....	5	.....	.....	.....	.....	15	8
Erie	28,568	3	11	20.5	.....	.....	.....	2	.....	.....	.....	.....	1	.....	1	.....	.....	2	3
Del ..... Wilmington	44,000	10	21	25.8	6	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	393,796	61	142	18.8	24	8	4	7	5	3	12	.....	8	.....	2	.....	.....	44	3
District of Columbia	180,000	29	63	18.2	13	3	1	6	2	7	.....	.....	6	.....	2	.....	.....	19	3
Va ..... Norfolk	26,200	6	16	34.3	1	.....	1	1	.....	1	.....	.....	3	.....	.....	.....	.....	4	.....
Richmond	65,000	9	22	17.9	6	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	1	4	.....
Lynchburg	16,500	3	9	28.4	2	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	6	10	29.7	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	6	22	20.1	5	.....	.....	.....	2	1	.....	.....	3	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	4	12	23.2	1	2	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Atlanta	38,000	1	7	9.5	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Savannah	33,248	9	23	36.3	4	.....	4	1	.....	2	.....	.....	3	.....	.....	.....	.....	.....	.....
Rome	5,000	1	2	20.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	.....	8	41.7	1	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	3	4	17.4	.....	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	8	22	28.6	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Selma	7,505	2	4	27.8	1	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....
Miss .... Columbus	5,230	1	3	29.9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	.....	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	1	2	8.3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	34	121	29.2	18	.....	6	.....	2	15	1	.....	5	.....	1	.....	.....	.....	4
Shreveport	8,033	2	6	37.1	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	2	5	36.3	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	20,597	3	7	17.7	1	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	3	.....
Austin	16,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galveston	22,368	7	21	51.6	2	.....	3	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	2	4	9.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	2	11	13.0	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	3	.....
Clarksville	7,250	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Memphis	34,000	4	21	32.2	4	.....	3	.....	2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	10	36	10.7	6	.....	1	.....	1	.....	1	.....	4	.....	.....	.....	.....	3	3
Ohio .... Cincinnati	280,000	26	80	14.9	7	1	.....	2	.....	.....	2	.....	12	.....	1	.....	1	11	5
Cleveland	175,000	.....	60	17.8	10	6	1	4	.....	.....	2	.....	5	.....	.....	.....	.....	.....	1
Gallipolis	4,500	.....	1	11.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	2	6	8.0	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
Portsmouth	11,320	.....	3	13.8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ind ..... Indianapolis	75,350	7	23	15.7	4	.....	.....	2	2	.....	1	.....	2	.....	.....	.....	.....	5	.....
Richmond	13,000	.....	2	8.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evansville	30,000	1	8	13.9	2	.....	.....	.....	.....	1	.....	.....	3	.....	.....	.....	.....	.....	1
Ill ..... Peoria	34,850	6	11	16.4	.....	3	2	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Aurora	12,059	.....	2	8.7	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	1	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Elgin	8,770	2	4	24.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	116,000	25	52	21.9	7	5	1	5	2	.....	6	.....	3	1	.....	.....	.....	27	2
Minn .... Saint Paul	41,800	8	12	15.0	.....	.....	.....	5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Mich ... East Saginaw	19,065	1	5	13.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Flint	9,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa .... Keokuk	12,125	.....	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 6, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Iowa ....Davenport	23,000	4	6	13.7	.....	4	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	4	.....
Mo .....Saint Louis	333,577	33	112	17.5	16	1	7	4	5	8	1	.....	4	.....	2	.....	.....	35	6
Nebr ....Omaha	31,000	3	5	8.6	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Kans ....Lawrence	8,500	1	1	6.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	5	10	20.9	1	2	1	2	.....	.....	.....	.....	1	.....	.....	.....	.....	5	1
Cal .....San Francisco	233,700	30	90	20.0	15	.....	5	2	2	.....	.....	.....	11	.....	2	1	2	16	3
Sacramento	21,500	.....	8	19.4	2	.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	.....	1	4.8	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	2	3	22.1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,876,913	920	3,010	19.9	473	126	93	213	82	68	65	3	222	1	30	25	20	561	111

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING NOVEMBER 6, 1880.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass ....Boston	370,000	5,000	153	5	21.6	52.2
R. I .....Providence	100,862	3,800	33	1	27.0	13.7
Del .....Wilmington	38,000	6,000	20	1	22.2	8.7
Md .....Baltimore	338,384	55,412	112	30	17.2	28.3
District of Columbia	120,000	60,000	27	36	11.7	31.2
Va .....Norfolk	14,900	11,300	12	4	44.9	18.5
Richmond	37,970	26,697	6	16	6.7	31.4
S. C .....Charleston	25,000	32,000	6	16	12.5	26.0
Ga .....Savannah	18,229	15,019	8	15	22.8	51.9
Augusta	16,182	10,830	9	3	29.1	14.0
Atlanta	22,000	16,000	4	3	9.5	9.8
Fla .....Jacksonville	6,000	4,000	7	1	60.9	13.0
Ala .....Mobile	28,000	12,000	8	14	14.9	60.9
Selma	3,425	4,080	2	2	30.5	25.6
Miss ....Columbus	2,670	2,560	1	2	19.5	40.7
Natchez	3,500	3,500	....	1	....	14.9
La .....New Orleans	159,128	57,231	87	34	28.4	31.0
Shreveport	3,916	4,117	2	4	26.6	51.0
Tex .....Austin	12,000	4,000	.....	.....	.....	.....
Tenn ....Nashville	27,874	15,669	2	9	3.7	29.7
Clarksville	4,000	3,250	.....	.....	.....	.....
Memphis	17,293	16,707	9	12	27.2	37.5
Ky .....Louisville	153,125	21,875	24	12	8.2	29.4
Ohio .....Portsmouth	10,320	1,000	2	1	10.1	52.2
Iowa ....Keokuk	11,165	960	.....	.....	4.7	.....
Kans ....Lawrence	6,800	1,700	1	.....	7.7	.....
Totals	1,550,743	394,707	535	222	18.0	29.3

The following reports, for the week ending November 6, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; under 5 years, 1; malarial fever, 1. Allegheny, Pa., 78,000; deaths, 26; under 5 years, 8; consumption 3, diphtheria 2, enteric fever 4, scarlet fever 1, lung disease, 1. Belfast, Me., 5,308; deaths, 4; consumption 2, old age 1. Brattleboro', Vt., 6,000; deaths, 2; under 5 years, 1. Bucyrus, Ohio, 3,950; death, 1; consumption 1. Calais, Me., deaths, 3. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 4; lung disease 1, accident 2. Circleville, Ohio, 6,400; deaths, 2; under 5 years, 2; diphtheria 2. Clinton, Mich., 1,200; no deaths. Corinth, Miss., 2,264; death, 1; under 5 years, 1; diphtheria 1. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,300; deaths, 4; under 5 years, 3; consumption 1, diarrhœa 1, lung disease 1, puerperal 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Hernando, Miss., 1,000; no deaths. Helena, Mont., 3,630; deaths, 1; under 5 years, 1; diphtheria 1. Huntingdon, Tenn., 1,200; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 2; under 5 years, 1; malarial fever 1, lung disease 1. Kenosha, Wis., 5,500; deaths, 4; under 5 years, 3; diphtheria 2, lung disease 1. Lebanon, Pa., 9,000; no deaths. Louisiana, Mo., 5,200; deaths, 3; consumption 1. Madison, Ind., deaths, 7; diphtheria 1, malarial fever 1, scarlet fever 1. Massillon, Ohio, 6,868; death, 1. Meridian, Miss., 4,013; deaths, 2. Milledgeville, Ga., 3,000; death, 1; under 5 years, 1. Monmouth, Ill., 6,000; deaths, 3; diphtheria 1, lung disease 1. Mount Pleasant, Iowa, 4,500; death, 1. Morton, Miss., 200; no deaths. Muscatine, Iowa, 8,412; deaths, 3; scarlet fever 2. Muskegon, Mich., 11,300; deaths, 3; under 5 years, 1; croup 2, diptheria 1. Nebraska City, Nebr., 5,200; deaths, 3; under 5 years, 3; croup 1, diphtheria 2. Niles, Mich., 4,200; death 1. Okolona, Miss., 2,000; no deaths. Painesville, Ohio, 5,504; death, 1. Pass Christian, Miss., 2,000; death, 1; puerperal, 1. Pearlington, Miss., 1,200; death, 1 Phœnixville, Pa., 6,692; deaths, 2; consumption 1. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; no deaths. Ripley, Miss., 1,000; death, 1; under 5 years, 1; whooping-cough 1. Rock Island, Ill., 12,000; deaths, 3; under 5 years, 2. Santa Cruz, Cal., 5,000; death, 1. Shelbyville, Tenn., 1,919; death, 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; death, 1. Summit, Miss., 1,808; deaths, 3; under 5 years, 3; diphtheria 2, malarial fever 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 2; under 5 years, 2; lung disease 1. Winchester, Va., 5,000; no deaths. Youngstown, Ohio, 15,089; deaths, 3; under 5 years, 2; consumption 1, diarrhœa 1, accident 1. Total population, 324,302; deaths under 5 years, 37; total number of deaths, 105; annual rate per 1,000, 16.9.

VICKSBURG, MISS.—Under date of November 9, Dr. W. T. Balfour reports four more cases of scarlet fever, all in one family, the patients being from three to eight years of age. The residence of this family is remote from the cases reported some weeks ago; but the children last attacked attended school in a house opposite to that in which the first cases occurred. None of the cases are likely to prove fatal.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880..															
Vancouver's Island	Victoria	5,000	Oct. 30	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52.0
Canada	Kingston	15,000	Nov. 6	5	16.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44.2
Cuba	Havana	195,437	Oct. 30	144	38.4	.....	.....	.....	14	.....	10	.....	1	.....	.....	.....	.....	79.0
Trinidad	Spain	30,000	Sept. 11	20	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	30,000	Sept. 18	28	48.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Do	....do	30,000	Sept. 25	22	38.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Do	....do	30,000	Oct. 2	25	42.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
British Honduras	Belize	4,000	Sept. 25	4	52.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.4
Do	....do	4,000	Oct. 2	3	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.7
Do	....do	4,000	Oct. 9	3	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81.6
Hayti	Port-au-Prince	30,000	Oct. 27	17	29.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.0
Do	....do	30,000	Nov. 3	21	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91.0
Guadaloupe	Point-a-Pitre	22,919	Oct. 9	7	15.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,919	Oct. 16	17	38.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,919	Oct. 23	7	15.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	Matamoras	16,000	Oct. 30	19	62.0	.....	.....	.....	.....	100	7	.....	.....	.....	.....	.....	.....	.....
Do	Vera Cruz	20,000	Oct. 15	69	179.9	.....	.....	.....	18	.....	.....	.....	.....	.....	.....	.....	.....	79.8
Do	....do	20,000	Oct. 24	37	96.5	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	82.0
Azores	Fayal	7,630	Aug. 14	8	54.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.0
Do	....do	7,630	Aug. 21	1	6.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.0
Do	....do	7,630	Aug. 28	2	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.0
Do	....do	7,630	Sept. 4	5	32.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.0
Do	....do	7,630	Sept. 11	1	6.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.0
Do	....do	7,630	Sept. 18	2	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.0
Do	....do	7,630	Sept. 25	5	32.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.0
Do	....do	7,630	Oct. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.0
Teneriffe	Santa Cruz	16,610	Oct. 9	13	40.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73.0
Do	....do	16,610	Oct. 16	5	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.0
Ireland	Queenstown	10,000	Oct. 30	7	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.0
Do	Belfast	230,000	Oct. 23	77	22.0	.....	.....	.....	.....	.....	.....	23	4	.....	.....	.....	.....	44.9
Do	Dublin	314,666	Oct. 23	197	32.2	.....	.....	.....	.....	.....	1	.....	2	.....	1	.....	20	40.3
Scotland	Dundee	155,100	Oct. 23	59	19.9	.....	.....	.....	.....	.....	.....	5	1	.....	.....	12	1	.....
Do	Leith	58,479	Oct. 30	16	14.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	41.2
England	London	3,664,149	Oct. 23	1,518	21.6	.....	.....	.....	.....	.....	7	.....	20	.....	.....	.....	102	42.9
Do	Bradford	197,196	Oct. 16	88	23.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....
Do	....do	197,196	Oct. 23	104	27.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....
Do	Bristol and Clifton	213,560	Oct. 23	95	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	43.5
Do	Liverpool	544,056	Oct. 30	281	26.9	.....	.....	.....	.....	.....	.....	1	2	30	2	31	25	.....
Do	Tunstall	27,775	Oct. 30	18	33.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	43.3
Wales	Cardiff	82,364	Oct. 30	23	14.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	43.2
France	Paris	1,988,806	Oct. 28	892	23.3	.....	.....	.....	.....	.....	18	.....	49	.....	.....	.....	99	.....
Do	Rouen	104,209	Oct. 30	63	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Zurich	22,103	Oct. 23	9	21.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Amsterdam	316,952	Oct. 23	168	27.7	.....	.....	.....	.....	.....	.....	.....	4	.....	3	.....	2	45.0
Do	Rotterdam	150,378	Oct. 30	79	27.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	2	.....
Germany	Berlin	1,096,644	Oct. 16	527	25.0	.....	.....	.....	.....	.....	.....	46	13	1	.....	136	75	47.0
Do	Breslau	276,000	Oct. 16	153	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	48.0
Do	Bremen	109,000	Oct. 16	38	18.2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Do	Cologne	141,639	Oct. 23	86	31.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	14	.....
Do	Frankfort	130,000	Oct. 16	40	16.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.0
Do	....do	130,000	Oct. 23	44	17.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	45.0
Do	Hamburg	400,000	Oct. 9	172	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....
Do	Mannheim	50,500	Oct. 31	19	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.0
Do	Barmen	95,000	Oct. 23	25	14.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	43.0
Do	Brunswick	74,000	Oct. 23	28	19.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Bavaria	Nuremberg	105,000	Oct. 16	45	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	46.0
Saxony	Dresden	220,500	Oct. 16	81	19.1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	10	10	49.0
Do	Chemnitz	100,541	Oct. 16	46	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	50.0
Do	Leipsic	150,836	Oct. 23	51	17.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	43.0
Denmark	Copenhagen	235,254	Oct. 19	136	29.2	.....	.....	.....	.....	1	.....	49	4	.....	.....	12	.....	45.0
Italy	Rome	305,161	Aug. 14	188	31.9	.....	.....	.....	.....	.....	15	.....	1	.....	.....	.....	38	72.0
Do	....do	305,161	Aug. 28	199	34.0	.....	.....	.....	.....	.....	25	.....	7	.....	.....	.....	38	77.0
Do	....do	305,161	Aug. 21	176	30.1	.....	.....	.....	.....	.....	6	.....	8	.....	.....	.....	34	24.8
Do	....do	305,161	Sept. 11	184	31.4	.....	.....	.....	.....	.....	22	.....	9	.....	.....	.....	37	23.1
Austria	Vienna	746,243	Oct. 23	304	18.5	.....	.....	.....	.....	.....	11	.....	7	.....	.....	.....	12	48.0
Hungary	Buda-Pesth	344,604	Oct. 16	204	30.9	.....	.....	.....	.....	.....	10	.....	6	.....	.....	.....	5	.....
Russian Poland	Warsaw	357,169	Oct. 16	207	36.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	44.0
Norway	Christiania	116,801	Oct. 16	55	24.4	.....	.....	.....	.....	.....	.....	9	2	.....	.....	13	8	38.0
Sweden	Stockholm	169,429	Oct. 16	98	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	39.0
Portugal	Lisbon	225,152	Oct. 2	135	31.2	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	67.0
Do	....do	225,152	Oct. 9	151	34.9	.....	.....	.....	.....	.....	.....	.....	14	.....	.....	.....	.....	65.0
Do	Oporto	108,346	Oct. 2	69	33.2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	66.0
Do	....do	108,346	Oct. 9	88	42.4	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	63.0
Spain	Cadiz	65,028	Oct. 23	34	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.0
Barbary	Tripoli	20,000	Oct. 16	11	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.5
Seychelles Island	Mahé	12,000	Sept. 18	6	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Sept. 25	2	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Oct. 2	3	13.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
China	Shanghai	2,197	Sept. 28	1	26.1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.8
Do	....do	2,197	Oct. 5	3	78.2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.0
Japan	Kobe	18,282	Oct. 2	12	34.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,282	Oct. 9	8	22.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,282	Oct. 16	17	48.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

National Board of Health

BULLETIN.

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SANITARY SURVEY OF BILOXI, MISSISSIPPI.

Dr. A. P. Champlin, sanitary inspector for the National Board of Health at Biloxi, Miss., during the summer of 1880, submits a report on that place, in the form of the schedule of the National Board, of which report the following is an abstract:

The city of Biloxi, Harrison County, Mississippi, is situated in latitude 30° 24′ north, and longitude 88° 54′ west. It was incorporated February 18, 1850, and in 1860 the population was 804; in 1870 it was 970, and at present is estimated at 1,352, of whom about 225 are colored, 225 of foreign birth, and 852 native whites. No meteorological records have been kept, nor is there any provision for registration of births, deaths, or marriages. The city fronts on Mississippi Sound and Biloxi Bay, with some marshes near the head of the bay, and islands subject to overflow at high-tide. These marshes are not regarded as sources of malaria, the water being salt. The greatest elevation of the ground is about 25 feet above the sea level, with a general slope to the southeast, towards the Sound; on the north and east is the bay of Biloxi. The ground is undulating and broken by several ravines and valleys, which facilitate surface drainage. There is no system of underground sewerage, but the present system seems sufficient for present needs. In the fall and winter some stagnant ponds are formed near the town, and falling leaves decay in them; the exposure of the shores at low-tide does not appear to generate disease, the surface soil being generally of sand. The substratum is of clay, and no disease has ever been traced to disturbance of the surface, nor to infiltration conveyed by the ground water. The water supply is from wells and cisterns, and is abundant and pure.

The area of the city is about 3½ by 1½ miles, or 5¼ square miles, of which about one-third is covered by buildings and grounds attached. The cellars of these buildings are not liable to overflow, or intrusion of ground water, and are generally dry and clean.

The streets are from 18 to 40 feet wide, with sidewalks of 4 feet. About one mile of street surface is paved with shells; the rest is of clay, excepting some 300 feet of wooden pavement. There is no provision for cleaning or watering the streets, but their condition is generally satisfactory. No difference of healthfulness is noted with reference to the direction of the streets. Along the sidewalks are rows of mulberry, oak, and locust trees; no injurious effect has been observed from any of the trees so planted. There are no public parks. The houses are constructed without regulation by the authorities, but are generally in good condition, and have ample space around them, with facilities for bathing, and dry and clean basements and cellars. The average of four persons to a house indicates that there is no overcrowding. Inside walls are usually whitewashed; where paper is used no disease has been noted as caused by it. There is no gas used in lighting the city or houses. Garbage and refuse matters are disposed of by the occupants of houses, being burnt on the premises or buried outside of the city. This duty is mostly well performed, and back yards and cellars are kept very clean.

There is but one market-house, with 8 stalls for meats and 4 for vegetables. This is regulated by municipal ordinances, is open daily from 4 to 10 a. m., and its sanitary condition is assured by inspection. Provisions of all kinds are usually brought from the country, and the smaller animals, fowls, &c., are sold alive. No case is noted of bad meat or vegetables being offered for sale. The supply of milk is abundant and cheap. No manufacturing establishments exist in or near the city. There is but one public school, a two-story building, 60 by 24 feet, with 12 feet between the stories. The building is well lighted, and the desks, 50 in number, are placed near the windows. The water supply, provision for exercise, &c., are good, and the pupils have been free from epidemic diseases for the past four years, excepting the epidemic of yellow fever in 1878, and some *dengue* this year. Diseases of the spine, of the brain, and of the eyes are not observed among the pupils.

There is no hospital or other establishment for public charity in the city. The police inspect nuisances and perform the usual police duty, but only by day. One jail serves for prisoners of both sexes, but they are very few in number, and the cells afford ample air space. No reports are published, but no epidemic disease is known to have existed in the jail. The prisoners have good plain diet, and are not compelled to work. No houses of prostitution are known to exist in the city, and only three or four prostitutes are known as such; these are as healthy, apparently, as other women. There are five licensed sellers of liquor, and two beer-gardens. It is estimated that 7,000 gallons of beer, and 4,000 gallons of spirits are sold yearly, but there have been no arrests for intoxication within the past year, and those who drink habitually seem to enjoy as good health as those who never indulge.

The provision for burial consists of two cemeteries, one for the general use of Protestants and Catholics, the other for Jews. Both are remote from habitations, and there is no reason to suspect any contamination of the water supply from them. The graves are usually 4 feet deep, in a dry sandy soil, and the decomposition of bodies is completed in from one to two years A few brick-lined vaults are used, but there is no receiving vault, and no special precautions are observed in interring those dying of contagious diseases. The board of health of the city has no physician nor executive health officer; it is composed of the mayor and four aldermen, who are elected by the people, and serve two years without salary. The powers of the board are derived only from city ordinances, and are ample as to right of inspection and abatement of nuisances. Small-pox cases are either strictly isolated, or removed to hospital, and the regulation on this subject is generally enforced; vaccination is not compulsory. No vital statistics are kept, and burial permits are not required. The only aid received by the city in sanitary matters has been from the National Board of Health, whose inspector has been on duty during the past summer.

DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

Under date of November 23, the Hon. John Hay, Assistant Secretary of State, informs the National Board of Health of the receipt of a telegram from the United States consulate at Vienna, stating that Hungary will be represented in the International Sanitary Conference to be held in Washington January 1, 1881.

ABSTRACTS FROM CONSULAR REPORTS.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys reports for the month of September 61 deaths in a population of 20,000, being at an annual rate of 37.2 per 1,000. There were no contagious diseases, and the sanitary condition is good. Mean temperature 83°.

FLUSHING, NETHERLANDS.—United States Consul P. Smith reports for the month of October a continuance of the remarkabe exemption from disease noted in the last report from his consular district. No statement of mortality is given this month. About 12 cases of measles have occurred during the whole summer, but none have proved fatal.

GHENT, BELGIUM.—United States Consul S. Spackman reports for the month of October: typhoid fever 8 deaths, scarlet fever 1, other contagious diseases 4, consumption 46, other lung diseases 26, diarrhœal diseases 74. Total number of deaths 282; population 130,670; annual death-rate 25.4 per 1,000.

GUAYMAS, MEXICO.—United States Consul A. Willard reports for the month of October 14 deaths in a population of 5,500; annual death-rate 30 per 1,000. Mean temperature 82°. No epidemic prevails, but those who have previously had malarial fever are subject to a low fever with congestive symptoms. Two deaths from whooping-cough are all that are noted from any contagious disease.

MALTA AND GOZO.—The report of United States Consul C. B. Eynaud for the two weeks ending October 31 shows only 4 deaths from typhoid fever, and none from other contagious diseases. Total number of deaths 209; population (exclusive of 7,000 troops) 154,830; annual death-rate 35.2 per 1,000. Mean temperature 73°. The drainage of Valletta is being improved.

MATAMOROS, MEXICO.—United States Consul W. P. Sutton reports

12 deaths from small-pox during the week ending November 6, the number of cases being estimated at 200. The total number of deaths during the week was 21; population 16,000; annual death-rate 68.4 per 1,000. Sanitary condition very bad, and small-pox is rapidly spreading over the city.

NASSAU, BAHAMAS.—The reports of United States Vice-Consul S. P. Saunders for the two weeks ending November 6 give no statement of deaths. Mean temperature 80° to 81°; physicians report the health of the city good, and the town is clean and well drained. No yellow fever has occurred for three weeks, and there are but few cases of malarial fevers, intermittent and remittent. Irregularity in sending reports is entirely due to want of communication with the United States, as explained in a note from United States Consul T. J. McLain, jr.

RIO DE JANEIRO.—United States Consul T. Adamson reports, for the three weeks ending October 16, 5 deaths from yellow fever, 2 from small-pox, 2 from typhoid fever, 15 from pernicious fever, and 92 from consumption. Population, 330,000; annual death-rate, 24.3 per 1,000. Yellow fever is declining, 3 of the 5 deaths occurring in the first week of the three reports.

SANTIAGO DE CUBA.—The report of United States Consul J. C. Landreau for the month of August gives 151 deaths from yellow fever, 40 from small-pox, and 9 from typhoid fever, out of a total of 402 deaths in a population of 40,000. These figures would give an annual death-rate of 118.3 per 1,000. No yellow fever or small-pox being reported in or near the harbor, clean bills of health are still granted to vessels clearing for the United States. The cases of yellow fever were almost confined to the Spanish troops. Mean temperature, 83°.

For the month of September there were 66 deaths from yellow fever, 31 from small-pox, and 10 from typhoid fever. Total deaths, 245; annual death-rate, 74.5 per 1,000. Mean temperature, 83°. Clean bills of health given to vessels having no sickness on board.

VALPARAISO, CHILI.—United States Consul L. H. Foote reports for the month of August 62 deaths from consumption, 73 from other lung diseases, 73 from fevers, and only 4 from small-pox. Total deaths, 401; population, 101,088; annual death-rate, 46.7 per 1,000. Referring to the virtual extinction of small-pox, which for some months caused an enormous mortality, the consul observes that with even a little care the city should be kept free from epidemic diseases. The sanitary condition has of late been much improved by copious rains which have washed out the open sewers and drains.

VERA CRUZ, MEXICO.—United States Consul S. T. Trowbridge, in his report for the week ending October 31, reports 17 deaths from yellow fever, of which 3 occurred in the week previous, but were not then known to the authorities. The recent increase of yellow fever has been at the time when the "northers" begin, and these cold winds have always been looked for as bringing a cessation of the disease, if prevailing. Mean temperature 84°. Sanitary condition of the city very good.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BURLINGTON, VT.—Under date of November 10, Dr. G. M. Ockford reports that the general health of the city has been good during the past month. Scarlet fever continues to prevail, but mostly of a mild type; rheumatic affections seem to be the principal *sequelæ* of the disease. Diphtheria has increased and caused three deaths during the month; two of these were of children in one family, and the third a child of the physician who attended the other cases. This latter case proved fatal in four days, and a marked feature of the disease has been a tendency to hydrocephalus and other affections of the brain in young children.

HAVANA, CUBA.—During the week ending November 12, there were 7 fatal cases of yellow fever, one of them being the steward of the American schooner *Jefferson Borden*, who died on board. The steamship *City of Merida* left Vera Cruz on the 4th, and sails from Havana for New York on the 13th. One of the passengers died on the voyage to Havana. He was a member of an opera troupe which had been engaged for the past month in Vera Cruz, and as another of the troupe came ashore at Havana with undoubted symptoms of yellow fever, it is inferred that the former death was from that disease. Disinfection of the rooms occupied by these two persons will be attended to before the steamer leaves for New York. The following vessels are believed to have had yellow fever on board while at Havana, though more than fifteen days have elapsed since the last case: Spanish brig *Pedro Turull*, for Charleston, November 9; Spanish brig *Julito*, for New Orleans, November 9; Spanish brig *Maria*, for New Orleans, November 9; Spanish bark *Valparaiso*, for Charleston, November 10; Spanish bark *Felo*, for Charleston, November 10; and the Spanish brig *Soberano III*, cleared for Charleston.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 13, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Portland	34,000	.....	3	4.6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bangor	16,780	1	9	27.5	1	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
N. H. ..... Concord	14,000	1	6	22.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	1	2	6.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Mass .... Boston	375,000	59	165	23.0	34	6	4	18	1	.....	.....	.....	22	.....	2	.....	1	39	4
Cambridge	52,800	5	13	11.8	4	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,268	3	8	15.3	1	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Newburyport	13,800	3	4	14.9	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	1	4	27.9	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Nantucket	3,777	.....	4	55.2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	6	19	20.2	3	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Plymouth	7,148	.....	2	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowell	59,485	7	19	16.6	4	2	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	3	.....
Lawrence	39,000	4	7	9.4	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,000	10	25	22.4	3	.....	.....	.....	3	.....	5	.....	2	.....	.....	.....	1	.....	.....
Lynn	38,400	7	18	24.5	3	.....	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Brockton	13,598	1	6	22.5	1	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	5	9	21.3	1	.....	1	.....	1	.....	.....	.....	4	.....	.....	.....	.....	.....	.....
Bridgewater	3,645	.....	1	14.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,200	1	1	5.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	.....	3	14.4	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	1	3	12.5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	1	5	10.4	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Springfield	33,000	3	7	11.1	2	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	3	.....
R. I. ..... Providence	104,862	7	39	19.4	7	3	.....	2	2	.....	3	.....	1	.....	.....	.....	.....	10	.....
Conn .... New Haven	63,000	10	28	22.8	3	1	.....	2	.....	2	.....	.....	1	.....	.....	.....	.....	5	1
Waterbury	20,300	2	5	12.9	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. Y. ..... New York	1,203,323	240	605	26.1	94	29	18	40	2	11	28	.....	86	.....	6	.....	4	161	24
Brooklyn	566,689	107	248	22.9	33	11	5	51	1	3	3	.....	49	1	1	1	.....	81	11
Yonkers	19,000	.....	3	8.2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Poughkeepsie	20,200	1	7	18.2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Newburgh	18,043	2	3	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utica	34,500	1	7	10.7	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Rochester	90,000	8	31	18.0	6	.....	.....	2	1	.....	2	.....	1	.....	1	.....	.....	6	4
Buffalo	155,159	23	54	18.1	8	5	1	6	2	1	3	.....	2	.....	.....	.....	.....	18	1
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	23	75	18.7	10	6	1	.....	.....	1	1	.....	15	.....	3	.....	.....	12	6
Newark	138,000	18	53	20.3	4	3	4	3	.....	1	.....	.....	8	.....	1	.....	.....	7	.....
Orange	13,206	1	3	12.0	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden	41,714	3	8	10.0	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	3	.....
Plainfield	8,160	.....	2	13.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	850,000	87	287	17.6	52	6	3	9	13	.....	8	.....	17	.....	.....	18	2	.....	.....
Pittsburgh	156,649	16	56	18.4	8	.....	.....	7	4	.....	6	.....	5	.....	.....	.....	.....	17	4
Erie	28,565	7	10	18.5	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Del ..... Wilmington	44,000	6	16	19.6	1	.....	1	.....	.....	.....	3	.....	.....	.....	1	.....	.....	.....	1
Md ..... Baltimore	393,796	49	130	17.3	19	4	2	4	4	1	6	.....	7	.....	1	.....	4	26	4
District of Columbia	180,000	30	66	19.1	13	2	2	1	.....	4	.....	.....	1	.....	2	.....	.....	15	3
Va ..... Norfolk	26,200	10	20	40.4	5	1	1	3	.....	1	.....	.....	3	.....	.....	.....	.....	5	.....
Richmond	65,000	7	23	18.7	8	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Lynchburg	16,500	2	6	19.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
N. C ..... Wilmington	17,600	4	5	14.9	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	5	28	25.5	3	.....	1	.....	2	.....	.....	.....	5	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	10	18	34.9	3	.....	2	1	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....
Atlanta	38,000	3	12	16.2	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Savannah	33,248	13	25	39.4	3	1	1	2	.....	2	.....	.....	4	.....	.....	.....	.....	.....	.....
Rome	5,000	1	3	31.3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	.....	2	10.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	1	5	21.7	.....	.....	.....	.....	.....	1	.....	3	1	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	3	10	13.0	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Selma	7,505	.....	1	7.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Miss .... Columbus	5,230	2	2	20.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	.....	2	8.3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	40	123	29.6	23	2	12	4	1	7	2	.....	9	.....	.....	.....	.....	.....	5
Shreveport	8,033	.....	1	6.5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morgan City	2,018	1	1	25.9	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	.....	3	21.8	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	20,597	1	5	12.7	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austin	16,000	2	3	9.8	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galveston	22,368	5	9	20.9	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	3	9	21.3	.....	.....	.....	.....	.....	1	1	.....	3	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	3	13	15.3	2	.....	2	1	.....	.....	1	.....	1	.....	.....	.....	.....	4	.....
Shelbyville	1,919	.....	1	27.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro	3,000	1	1	13.8	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Memphis	34,000	1	16	24.6	5	.....	2	.....	.....	1	.....	.....	1	.....	2	.....	.....	.....	.....
Ky ..... Louisville	175,000	14	42	12.5	10	.....	2	.....	3	.....	2	.....	3	.....	.....	.....	.....	7	1
Ohio ..... Cincinnati	280,000	28	77	14.3	9	1	3	2	3	.....	3	.....	7	.....	.....	.....	1	26	6
Cleveland	175,000	.....	53	15.8	5	3	.....	3	2	.....	5	.....	3	.....	.....	.....	.....	.....	3
Gallipolis	4,500	1	1	11.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	1	5	6.7	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Portsmouth	11,320	.....	2	9.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	4	20	13.6	2	.....	.....	4	2	.....	1	.....	4	.....	1	.....	.....	8	.....
Richmond	13,000	4	8	33.0	2	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Evansville	30,000	1	8	13.9	2	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Ill ..... Chicago	503,298	81	178	18.4	11	17	2	19	1	.....	4	.....	14	.....	4	.....	2	55	9
Peoria	34,850	1	6	9.0	.....	.....	.....	3	.....	.....	1	.....	2	.....	.....	.....	.....	4	.....
Aurora	12,059	1	4	17.4	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Jacksonville	15,000	.....	1	3.5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	1	3	17.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Moline	8,200	2	2	13.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	115,761	29	60	26.4	8	3	1	6	1	.....	5	.....	7	.....	.....	.....	.....	17	2
Minn .... Saint Paul	41,809	2	9	11.3	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 13, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Mich ... East Saginaw	19,065	1	1	2.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keokuk	12,125	.....	3	13.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa .... Davenport	23,000	.....	6	13.7	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	31,000	6	8	13.8	.....	.....	.....	1	1	.....	.....	.....	2	.....	.....	.....	1	.....	.....
Kans .... Lawrence	8,500	2	4	24.0	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Col ..... Boulder	3,030	.....	1	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah. .. Salt Lake City	25,000	7	15	31.3	1	.....	1	5	.....	.....	.....	.....	2	.....	1	.....	.....	6	1
Cal ..... San Francisco	233,700	17	79	17.6	13	.....	2	.....	.....	1	1	.....	8	.....	1	13	.....	19	4
Sacramento	21,500	2	7	17.0	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	1	6	28.7	2	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	2	14.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,020,483	1,086	3,037	19.7	467	121	81	217	64	47	95	3	331	2	29	33	17	570	99

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING NOVEMBER 13, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	164	1	23.1	10.4
R. I .....Providence	101,062	3,800	34	5	17.6	68.7
Del .....Wilmington	38,000	6,000	13	3	14.4	26.1
Md .....Baltimore	338,384	55,412	101	29	15.6	27.3
District of Columbia	120,000	60,000	39	27	16.9	23.4
Va.....Norfolk	14,900	11,300	6	14	22.4	64.6
Richmond	37,970	26,697	8	15	8.9	29.5
S. C .....Charleston	25,000	32,000	11	17	22.9	27.6
Ga.....Savannah	18,229	15,019	14	11	39.9	38.1
Augusta	16,182	10,830	9	9	29.1	42.2
Atlanta	22,000	16,000	5	7	11.9	22.9
Brunswick	1,500	1,400	.....	.....	.....	.....
Fla .....Jacksonville	6,000	4,000	1	1	8.7	13.0
Ala .....Mobile	28,000	12,000	6	4	11.2	17.4
Selma	3,425	4,080	1	.....	15.2	.....
Miss .... Columbus	2,760	2,470	.....	2	.....	40.7
La.....New Orleans	159,128	57,231	86	37	28.1	33.8
Shreveport	3,916	4,117	1	.....	13.3	.....
Baton Rouge	2,954	4,233	2	1	35.3	12.3
Tenn ....Nashville	27,874	15,669	7	6	12.8	19.8
Memphis	17,293	16,707	7	9	21.1	28.1
Murfreesboro'	2,000	1,800	.....	1	.....	29.0
Tex.....Austin	12,000	4,000	2	1	8.7	13.0
Galveston	17,064	5,244	9	.....	27.1	.....
Ky .....Louisville	153,125	21,875	29	13	10.0	31.9
Ohio.....Portsmouth	10,320	1,000	2	.....	10.1	.....
Iowa ....Keokuk	11,165	960	2	1	9.3	54.4
Kans ....Lawrence	6,800	1,700	4	.....	30.7	.....
Totals	1,567,051	400,544	563	214	18.7	27.9

The following reports, for the week ending November 13, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 1. Allegheny, Pa., 78,000; deaths, 26; under 5 years, 10; consumption 4, diphtheria 3, enteric fever 1, scarlet fever 3, lung disease 3, measles 1. Brattleboro', Vt., 6,000; deaths, 1. Bucyrus, Ohio, 3,950; deaths, 1. Calais, Me., 6,162; deaths, 1; under 5 years, 1; accident 1. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 6,400; no deaths. Clinton, Mich., 1,205; deaths, 1; under 5 years, 1; lung disease 1. Corinth, Miss., 2,264; deaths, 2; under 5 years, 1. Crystal Springs, Miss., 955; deaths, 1. Dallas, Tex., 10,300; deaths, 4; under 5 years, 2; diarrhœa 2, malarial fever, 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Helena, Mont., 3,640; deaths, 3; under 5 years, 2; diphtheria, 1. Hernando, Miss., 1,000; deaths 1. Huntingdon, Tenn., 1,200; no deaths. Iuka, Miss., 816; deaths, 1; consumption 1. Jefferson, Tex., 3,251; deaths, 4; under 5 years, 4; enteric fever 1. malarial fever 1, puerperal 1. Lebanon, Pa., 9,000; deaths, 1. Madison, Ind., 9,009; deaths, 6; under 5 years, 5; scarlet fever 4. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; death, 1; under 5 years, 1; croup 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,412; deaths, 2; consumption 1, scarlet fever 1. Nebraska City, 5,200; deaths, 2; diphtheria 1, enteric fever 1. Niles, Mich., 4,199; no deaths. Okolona, Miss., 2,000; no deaths. Painesville, Ohio, 5,504; deaths, 2; consumption 1. Pearlington, Miss., 1,200; no deaths. Plymouth, Mich., 3,000; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; no deaths. Ripley, Miss., 1,000; no deaths. Rock Island, Ill., 12,000; deaths, 4; diphtheria 1, croup 1. Santa Cruz, Cal., 5,000; no deaths. Starkville, Miss., 1,454; deaths, 1. Steubenville, Ohio, 13,500; deaths, 6; under 5 years, 2. Summit, Miss., 1,808; deaths, 1. Tampa, Fla., 750; no deaths. Titusville, Pa., 9,000; deaths, 2; croup 1, enteric fever, 1. Winchester, Va., 5,000; deaths, 1; under 5 years, 1. Youngstown, Ohio, 15,089; deaths, 7; under 5 years, 4; consumption 1, diarrhœa 1, enteric fever 1, accident 1. Total population, 263,148; deaths under 5 years, 35; total number of deaths, 83; annual rate per 1,000, 16.6.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Nov. 6	2	20.9													49.0
Canada	Kingston	15,000	Nov. 13	3	16.8													39.8
Bermuda	Hamilton	14,867	Nov. 2	5	17.5													71.0
Do	...do	14,867	Nov. 9	4	14.0													74.0
Cuba	Havana	195,437	Nov. 6	175	46.7				7		19		2					78.0
Hayti	Aux Cayes	10,000	Oct. 23	3	17.4													80.0
Do	...do	10,000	Oct. 30	10	58.0													80.0
Aspinwall	Colon	2,500	Nov. 6	2	41.8													85.0
Mexico	Matamoras	16,000	Nov. 6	21	68.5					200	12							
Do	Vera Cruz	20,000	Oct. 31	48	125.2				17									
Brazil	Rio de Janeiro	330,000	Oct. 2	151	23.8				3		1		1				7	
Do	...do	330,000	Oct. 9	153	24.2				1		1		1				2	
Do	...do	330,000	Oct. 16	158	25.0				1								6	
Ireland	Queenstown	10,000	Nov. 6	8	41.7													
Do	Belfast	230,000	Oct. 30	84	24.0							29	3				1	42.5
Do	Dublin	314,666	Oct. 30	210	34.7								2		2		21	39.7
Do	Belfast	230,000	Nov. 6	110	31.4							30	3					43.5
Do	Dublin	314,666	Nov. 6	207	34.2												21	
Scotland	Dundee	155,100	Oct. 30	79	26.6							3				29	2	39.2
Do	Leith	58,479	Nov. 6	32	28.4												3	41.3
England	London	3,664,169	Oct. 30	1,521	21.7						2		18		2		159	42.0
Do	Liverpool	544,056	Nov. 6	316	30.3							10	4	20	1	38	24	42.1
Wales	Cardiff	82,364	Nov. 6	31	19.5								3				2	44.8
France	Paris	1,988,806	Nov. 6	954	25.0						15		43				104	
Do	Rouen	104,209	Nov. 6	71	35.2													
Do	Havre	92,068	Oct. 30	60	33.9													47.0
Switzerland	Zurich	22,103	Oct. 30	8	18.9													
Holland	Amsterdam	316,952	Oct. 30	156	25.7								5		1		3	45.0
Do	Rotterdam	150,378	Nov. 6	81	28.1							1				47	1	
Germany	Berlin	1,096,644	Oct. 23	786	26.4							46	25			140	74	43.0
Do	Bremen	109,000	Oct. 23	50	23.9												2	
Do	Barmen	95,000	Oct. 30	27	14.8								1				3	44.0
Do	Brunswick	74,138	Oct. 30	36	25.3												1	
Do	Breslau	276,000	Oct. 23	124	23.4								5				14	43.0
Do	Cologne	141,639	Oct. 30	75	27.5								1				13	
Do	Frankfort	130,000	Oct. 30	41	16.5													58.0
Do	Hamburg	400,000	Oct. 16	169	22.0												6	
Do	Nuremberg	100,000	Oct. 23	43	21.4								2				1	46.0
Saxony	Chemnitz	100,541	Oct. 23	45	23.4												1	43.0
Do	Dresden	220,500	Oct. 23	80	18.9											10	10	43.0
Do	Leipsic	150,836	Oct. 30	50	17.3												2	42.0
Belgium	Brussels	406,638	Oct. 16	175	22.4								9				1	
Do	...do	406,638	Oct. 23	143	18.3													
Do	Antwerp	173,643	Oct. 23	87	26.1					25	6	44	2				1	
Do	...do	173,643	Oct. 30	98	29.4					28	11	37	10				2	
Denmark	Copenhagen	235,254	Oct. 26	98	21.8					49						18		
Italy	Rome	305,161	Sept. 11	168	28.7						12			4			25	75.0
Austria	Vienna	746,243	Oct. 30	330	19.9						11		2		1		7	45.0
Hungary	Buda-Pesth	344,604	Oct. 23	202	30.6						7		5				5	
Russian Poland	Warsaw	357,169	Oct. 23	164	24.0						2							41.0
Sweden	Stockholm	169,429	Oct. 23	71	22.4												12	34.0
Norway	Christiania	116,801	Oct. 23	57	25.4							13	1			12	8	35.0
Spain	Seville	138,000	Oct. 23	78	29.5						1						4	61.0
Do	...do	138,000	Oct. 30	74	28.0												5	63.0
Do	Cadiz	65,028	Oct. 30	42	33.7													75.0
Cape Colony	Cape Town	35,000	Oct. 11	24	35.4													74.0
Do	...do	35,000	Oct. 18	13	19.4													72.0
Egypt	Alexandria	220,000	Oct. 23	190	45.0													
Do	...do	220,000	Oct. 30	198	46.9													

National Board of Health

BULLETIN.

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THE ORIGIN AND GROWTH OF THE QUARANTINE SYSTEMS OF THE UNITED STATES.

NATIONAL LEGISLATION.

By STEPHEN SMITH, A. M., M. D., of New York.

On the organization of the Federal Government, in 1789, several of the sea-board States had quarantine laws and regulations of more or less efficiency. In most of these States the laws were originally adopted by the colonial governments, and in some they had been in effect for nearly a century. South Carolina enacted a quarantine law as early as 1698, Pennsylvania in 1699, Rhode Island in 1711, New Hampshire in 1714, New York in 1758. These early laws were chiefly designed to prevent the importation of small-pox, though yellow fever and ship or typhus fever had attracted attention as diseases capable of transportation. Yellow fever had several times, but at long intervals, been epidemic in sea-board towns having a large commerce with the West Indies, as at Boston in 1693; Philadelphia in 1699, 1741, 1747, 1762; New York, 1702, 1743; Charleston, 1699. But it did not attract general attention nor excite great public alarm until commerce with the West Indies, after the Revolutionary war, was fully established. From 1762 to 1791 the country was entirely free from yellow fever. This immunity has been attributed to the parliamentary acts known as the "commercial monopoly," and the war of the Revolution, which prevented all direct commerce with the West India ports and the United States. With the restoration of an active commerce with the West Indies yellow fever again began to make its appearance in those ports where this trade was most active. The first outbreak occurred in New York in 1791, in the West India shipping, and the pestilence proved very severe and fatal, and caused great public alarm. In 1793 it appeared in Philadelphia, and was then universally attributed to the shipping from the West Indies. The pestilence now began to excite public alarm, especially in neighboring cities having personal and commercial intercourse with Philadelphia. New York, Chestertown, Baltimore, and Annapolis took active measures, and finally established rigid land quarantines against Philadelphia. In 1794 it appeared in New York, Philadelphia, and Baltimore, and the public excitement was so great that there was a renewal of the land quarantines in various sections. In 1795 the fever again prevailed at New York and Norfolk, Va., and vigorous measures of protection were discussed and adopted by the authorities of other exposed towns. It would be impossible at this distant period to properly estimate the current events of the time when yellow fever first became widely epidemic at the close of the last century, had we not passed through a similar epidemic in 1878–'79. Then, as now, the disease was regarded as contagious and infectious, and all of the precautionary measures were designed to prevent the contact of the sick with the well. Maritime and land quarantines were established, and the latter was enforced with the shot-gun. In most of the details the measures of prevention in 1793 were the same as in 1878, more than three-quarters of a century later.

In order to understand the first act of Congress relating to quarantine it will be necessary to refer to the exciting events of that period. The following extracts from the papers of that date, kindly furnished by Dr. J. M. Toner, of Washington, reveal the intense excitement of the communities living in immediate communication with the centers of infection.

In 1793 the citizens of "Chestertown", Pa., held a public meeting. Their first resolve was: "It appearing to this meeting, from the information they have received, that the said disorder (an infectious disorder which at present prevails in the city of Philadelphia) has extended itself from Philadelphia to Trenton, Princetown, Woodbridge, and Elizabethtown, on the post-road to New York, it is the opinion of the meeting that the same has been occasioned by the stages passing through those places."

"2d. *Resolved, therefore*, That it is necessary and proper for the welfare of the inhabitants of this town that the stages should not pass through this place, and that notice of this resolution be given to the stage owner; and further, that if the said owner should refuse to comply with this resolution, that then the chairman shall call a second meeting to deliberate on and adopt such measures as self-preservation may in that case dictate and justify."

The mayor of New York, Richard Varick, issued a circular to the profession of that city, September 11, 1793, stating that "Great apprehensions are entertained by many of our fellow-citizens that, notwithstanding every prudent and legal precaution, the contagion of that distressing infectious disorder may be brought into this city by means of the open intercourse between the two cities, which cannot be lawfully interrupted by any power in this State." He informed them that a hospital had been provided for the sick, and requested reports in writing of every person arriving from Philadelphia who should be taken sick.

On the 17th September it is stated that "The corporation, at the request of the citizens of New York, have come to a resolution absolutely to prevent all intercourse between this city and the city of Philadelphia, and for this purpose guards are set at the different landings with orders to send back every person coming from Philadelphia to this city; and if any persons shall be discovered to have arrived in this city after this date, it is the resolution of the citizens immediately to send them back."—(Maryland Journal and Baltimore Advertiser, September 24, 1793.)

On the 12th September of the same year the governor of Maryland issued a proclamation establishing a rigid maritime and land quarantine. One provision is as follows: "And I have, with the advice of the council, thought further to direct that all persons coming to Baltimore Town, to Havre de Grace, to the Head of Elk, or by any other route making their way into this city from Philadelphia, or any other place known to be infected with the said disorder, shall be subject to be examined, and prevented from proceeding, by the person who will be appointed for the said purpose."

The plan of requiring each traveler to carry certificates of not having been recently exposed to the fever was also adopted, as appears from the following:

On the 24th September the citizens of Havre de Grace held a public meeting "to take into consideration their exposed situation on the post-road from Philadelphia, where a malignant fever now rages with great virulence," and passed the following resolutions: 1. That it is our opinion that no persons should be suffered to cross the Susquehanna who do not bring with them certificates, signed by some magistrate, of their not having lately come from Philadelphia or any other infected place. 2. That the citizens of this place embody themselves and act as a guard at the lower ferry of the Susquehanna to prevent any person crossing that does not come with the above certificate.—(Maryland Journal and Baltimore Advertiser, September 27, 1793.)

In other instances travelers were questioned under oath as to their recent movements. The corporation of Annapolis, Md., passed an ordinance September 27, 1793, appointing a health officer and requiring him "to examine upon oath or otherwise all strangers that may come to this city by water or in stages, and if, upon such examination, he shall be of opinion that there is no reason to apprehend that the said disease, or any other malignant disorder, will be communicated or introduced by the person or persons so examined, he shall grant a certificate or certificates to that effect." Another officer was required "on Mondays and Fridays to attend at the entrance into the city by land and give information to the said health officer of the arrival of the stage." The inhabitants were forbidden to harbor any traveler who had not been examined, as follows: "That whatever inhabitants of this city, or the precincts thereof, shall, after the publication of this by-law, take or receive into his or her house or family any person who shall come to the city in a stage, or any person who shall come to this city by water, until such person shall have obtained a certificate from the health officer of the city * * * shall forfeit and pay the sum of three pounds."

The inconveniences which travelers experienced by this land quarantine may be inferred from occasional letters of correspondents. A gentleman who left Philadelphia for the South, wrote, September 25 (Maryland Journal and Baltimore Advertiser, September 27, 1793): "We were stopped about seven miles from Baltimore by armed men who used us with every indignity and hatred truly indicative of *malice prepense*. These detained us in the stage from five in the afternoon until ten the ensuing morning. During this interval one of these ruffians, who appeared to be a German, snapped his piece at one of our party who seemed inclined to leave the stage with the apparent design to go in among the bushes near the road. This guard in their tender mercy were pleased to hand us a piece of dry cheese on the end of a pitchfork. After this quarantine we were permitted to go to Gray's Garden and thence to perform another for the space of two days and nights."

Another writes on the same date from Philadelphia: "On Friday evening all the New York and Philadelphia land stages returned to this city with their passengers mortified and fatigued. They were refused a passage through New Jersey. One of the drivers had a [illegible] fired upon at Trenton;

the ball passed within a few inches of his ears. No provisions were to be obtained on the road nor any accommodation of any kind even for the lady passengers."—(Virginia Chronicle and Norfolk and Portsmouth General Advertiser, October 5, 1793.)

In 1794 Philadelphia had an opportunity to retaliate upon Baltimore, where yellow fever prevailed severely. October 3, 1794, a public meeting was held in Philadelphia "to take into consideration the propriety of stopping all communication with the town of Baltimore during the present contagious disorder now raging in that place." At a subsequent meeting it was unanimously resolved "to stop the intercourse between this city and Baltimore, by land and water, on account of the contagious disorder now raging there; and a committee of twenty was appointed to see that this retaliation be carried into effect in such a way as to occasion the least possible injury to the public or breach of humanity to individuals." (Virginia Gazette and Richmond and Manchester Advertiser, October 16, 1794.) The governor of Virginia also issued a quarantine proclamation against all vessels from the port of Baltimore.

In 1795 Philadelphia also adopted a rigorous maritime and land quarantine against New York and Norfolk, Va., very much to the annoyance of New York. The governer of Pennsylvania, Hon. Thomas Mifflin, requested the board of health of Philadelphia, August 29, 1795, to inform him as to the prevalence of "a contagious disorder" in New York. The reply was that there was sufficient reason to believe that "a contagious fever" existed in that city, and that "the urgency of the case and the present anxiety of the citizens will justify" the stoppage of all intercourse between the cities. On August 31, 1795, the governor issued his proclamation, "with a sincere regret for the unhappy occasion," prohibiting for the term of one month, or until such prohibition shall by proclamation be lawfully removed, all intercourse between the said city of Philadelphia and the said city of New York and the said town of Norfolk, and any place or places within five miles thereof, respectively, as well by land as by water; the authorities of Philadelphia were directed, "with all possible vigilance and lawful authority and power, to guard the various avenues or entrances into the city of Philadelphia by land and water, so that any person or persons having been in the said city of New York or the said town of Norfolk within the space of ten days, and attempting to transgress the said prohibition by approaching nearer to the said city of Philadelphia than five miles, shall be forthwith remanded to the place or places whence such person or persons respectively came," &c.—(American Daily Advertiser, September 2, 1795.) On the 4th of September the New York board of health protested against the proclamation, and condemned the Philadelphia board for obtaining information through other channels than its own official records. The chairman of the health committee of the New York board, John Broome, wrote to the chairman of the Philadelphia board, Richard Zittermary, September 4, alleging: "The committee are so thoroughly persuaded that any information the inspectors of the board of health may have received which can justify the proclamation in question is unfounded that they have directed me to request from you, as chairman of the board of health for the city and liberties of Philadelphia, copies of the several letters as far as respects such information, together with the names of gentlemen who wrote them, and to express a hope that on future occasions the inspectors of the board will do them the justice to believe them full as capable and equally disposed with any individuals of this city to give every necessary information on a subject so interesting to the happiness and interests of both places."—(American Daily Advertiser, September 23, 1795.) The Philadelphia board refused to comply, as it would be a breach of confidence.

The governor of New York, Hon. John Jay, addressed a letter to the Medical Society of New York, September 4, asking for information in regard to the alleged contagious disease. He said: "The proclamation, by exciting alarms and apprehensions throughout this and neighboring States and in foreign countries, naturally tends to produce embarrassments to the commerce of this city, and to interrupt that intercourse with the country which is at all times necessary to the convenience and interests of both." The Medical Society, through its president, Dr. John Carleton, acknowledged the prevalence of a fever in low situations having an easterly exposure, with virulent symptoms which characterize fevers of the malignant sort. But though "the sensibility of the public mind on a subject of this nature, giving reality to apprehension, converted the necessary efforts for security and prevention into sources of fear and terror," the collective opinion of the society was that the fever was slightly, if at all, contagious, and was the same that occurred annually, having been rendered more malignant by local causes.

Governor Jay communicated these facts to Governor Mifflin, but the proclamation was not modified, and expired by limitation.

The public feeling in New York in regard to the proclamation of non-intercourse with Philadelphia appears in the following extract from the Daily Advertiser, New York, September 7, 1795: "The prohibition of intercourse between this city and Philadelphia is a proceeding very singular, and deserves severe animadversion. It is a measure that, to say the least, wears the aspect of a most unfriendly disposition, as it naturally tends to create unnecessary fears abroad, which may occasion an order for our vessels to perform quarantine in foreign ports to the great injury of our trade.

"It seems the board of health of Philadelphia reported to the governor the existence of a contagious disease in this city on the authority of private letters, without even writing to our health committee for a state of facts. This is a most extraordinary proceeding, when the reports of our committee have repeatedly informed the public that the epidemic now prevailing exhibits no decisive evidence of a specific contagion. Scarcely in one instance has an attendant on the sick taken the disease.

"This fact was known to the board of health and the governor of Pennsylvania, and yet the world is to be alarmed for the safety of Philadelphia, when the disease has not proved contagious enough to occasion any general alarm in New York. The disease is almost wholly local. Most parts of the city are entirely free from it. But one person died yesterday, and not more than five or six dangerously ill. In the name of common sense, must all the business of New York be impeded by the ill-timed inquiries of Philadelphia? Is this a generous return for $5,000 raised in New York to assist the suffering poor of Philadelphia during their great calamity? When dangers become real, will not the citizens of New York be alarmed? Let the public judge. The epidemic of this city is not a new disease. It is a disease that occurs more or less at this season in most of the seaports. It is not the disease that should occasion alarm, but its contagion, which depends mostly on local causes."

This protest of the New York papers seems very familiar reading in our time, and equally so the response of the Philadelphia correspondent of the Daily Advertiser. He writes, September 10: "Our New York brethren, it seems, are very angry at the proclamation of our governor prohibiting the intercourse for one month, unless after ten days absence, and complains that our board of health advised it, without writing to New York to obtain a state of facts. That they should be angry is very natural, but that the suspension of direct intercourse, for the present, take place, is no less just. The proclamation, however, was not issued before sufficient information was obtained of its necessity, though this did not come from the committee of health. On the contrary, every measure had been previously taken to have a true knowledge of the facts, and the result was that an epidemic fever raged in the upper part of the city, of which numbers died; that it was highly malignant, consequently there was every just reason to apprehend its introduction into this city, and self-preservation justified the measure adopted. The citizens of New York should recollect that the first alarm of this fever originated full six weeks since, and that it was not until two weeks past that the committee would even allow the existence of any fever than the common one of the season; that at least, when increasing mortality could no longer justify an attempt to conceal the truth, they did acknowledge the existence of an epidemic, but asserted its confinement to the upper party of the city. This was enough of itself, as it is ridiculous to suppose that a fever which had been gradually increasing for three weeks was not spread by contagion. The yellow fever of 1793 in Philadelphia was also chiefly confined for the first month to the neighborhood of its original appearance; the rest of the city was never more healthy, as is now rung in our ears constantly with respect to New York. But how did this fever of Philadelphia spread, and how is that now spreading at New York? We all know how positively the Baltimore committee denied last year that the yellow fever prevailed there; it was the bilious fever, fall fever, prevailing fever, unknown fever, every name but the right one was given it; thus it is at New York. It appears that both our port physicians wrote for the true state of the facts, and instead of these we have a lengthy disquisition upon the origin of contagion. * * * The citizens of New York should recollect that a burnt child dreads the fire, and that though the intercourse is prohibited, yet that humanity is joined with our precaution, and so far from firing upon their stages, denying the passengers any food but at the point of a pitchfork, and obliging them to sleep in the woods, nay even mixing the healthy with the sick upon Governor's Island, all of which were done to those from Philadelphia in 1793, the people of New York are merely prevented from coming nearer to this city than five miles, where they may meet with every accommodation and transact their business by letter."

Richmond and Petersburg, Va., quarantined against Norfolk. At a meeting held in Richmond, August 27, 1795, it was resolved, "That the committee appointed at a late meeting for the purpose be immediately authorized to engage a proper vessel and guards, and to lay such restrictions on the entrance of passengers, carriages, and goods, by land or water, into this city from Norfolk, or any other place infected with the pestilential fever now raging at Norfolk, as to them shall appear necessary."—(American Daily Advertiser, September 7, 1793.) Owing to the death of a person at Petersburg, who came from Norfolk sick with the fever, "guards are now placed out, to stop all persons coming from Norfolk to this town by land or water."—(American Daily Advertiser, September 9, 1795.)

The Fourth Congress met at Philadelphia, December, 1795, at the close of one the most alarming and widespread epidemics of yellow fever which had as yet been known. The conflicting opinions and acts of different State and municipal authorities in the adoption and enforcement of measures for preventing the importation and spread of yellow fever had excited much public comment. The fever was believed to be imported, and existing quarantines were regarded as inefficient, owing to a want of power on the part of the States to enforce their regulations. The questions which were raised in Con-

gress were twofold viz: 1. Should not the establishment and management of quarantines be exclusively the duty of the general government, under the provision of the Constitution empowering Congress "to regulate commerce"? 2. Is not a quarantine a police regulation of the State or municipality, and hence quite outside of this provision of the Constitution?

It is now a matter of great interest to understand the opinions of those who took part in the first discussion of the relations of the general and the State governments in the establishment and admistration of maritime quarantine. The debates on the quarantine bill are, therefore, given in full. The first representative who moved in the matter was from the State of Maryland, and the measure which he proposed was designed to place the quarantine systems of the United States entirely under the direction of the President, who at that time was General Washington. From the annals of Congress it appears that on the 28th of April, 1796, Hon. Samuel Smith, of Maryland, proposed a resolution to the following effect, which was referred to the Committee of Commerce and Manufacture to report thereon:

"*Resolved*, That the President of the United States be authorized to direct such quarantine to be performed on all vessels from foreign countries arriving at the ports of the United States as he shall judge necessary."

The committee consisted of the following members: Goodhue, of Massachusetts; Bourne, of Rhode Island; Livingston, of New York; Swanwick, of Pennsylvania; Smith, of Maryland; Parker, of Virginia; Smith, of South Carolina.

May 7, 1796, the committee reported a bill to regulate quarantine, which was read twice, and referred to a Committee of the Whole.

It was as follows:

"*Be it enacted, &c.*, The President of the United States be, and is hereby, authorized to direct at what place or station in the vicinity of the respective ports of entry within the United States, and for what duration and particular periods of time, vessels arriving from foreign ports and places may be directed to perform quarantine.

"*Be it enacted, &c.*, That the President of the United States be, and is hereby, authorized to direct the revenue officers, and the officers commanding ports and revenue cutters, to aid in the execution of quarantine, and also the execution of the health laws of the States, respectively, in such manner as may to him appear necessary."

On May 11, 1796, on motion of Mr. S. Smith, of Maryland, the House resolved itself into a Committee of the Whole, on the bill regulating quarantine.

Mr. Heister, of Pennsylvania, objected to the principle of the bill, as it proposed to take power from individual States to regulate what respected the health of their citizens, and to place it in the President of the United States. He thought the measure would be attended with very great incovenience. Many States lay very distant from the seat of government, and before information could be given to the President of the apprehension of any pestilence being introduced, and his answer received, the disease might be introduced into the country and great havoc made among the citizens. It appeared to him that the government of each individual State was better calculated to regulate quarantine than the general government, because upon the spot. And if the power was to be transferred from the President to the collectors at each port (that he conceived must be the case), it would put a vast deal too much power in their hands.

Mr. Smith, of Maryland, said that each individual State had, or might have, its own health laws, but the performing of quarantine was in the direction of the general government. The President ought to be empowered to designate the place where vessels should perform quarantine, to enforce the performance, and to determine at what time of the year it should commence and end. It ought, he believed, to commence at the present time.

Mr. Kittera, of Pennsylvania, understood that each independent State had a right to legislate on this subject for itself; and if they had no regulations on the subject it was because they had not felt the want of them. He believed that each State understood its own concerns better than the general government, and therefore the regulation might safely be left with them.

Mr. Smith, of Maryland, denied that there was any authority in the State governments to regulate quarantine. They could not command the officer of a port to use force to prevent a vessel entering their ports; the authority over him was in the general government.

Mr. Milledge, of Georgia, opposed the bill. He said the State from which he came was in the habit of regulating quarantine, and that it would be attended with many inconveniences, if the power was to be placed in the general government, to the State which he represented; on account of its distance, it would be particularly objectionable.

Mr. Giles, of Virginia, said that self-preservation justified every State in taking means to prevent the introduction of diseases among its citizens, and he thought the bill unnecessary.

Mr. Smith, of South Carolina, said the Constitution did not give to the State governments the power of stopping vessels from coming into their ports.

May 12th.—Mr. Heister, of Pennsylvania, moved to strike out the first section. It appeared to him as if it would be taking the power of regulating quarantine from the State governments and placing it in the hands of the collectors at different ports; and, as he believed the collectors were interested in proportion to the quantity of goods imported, the health of our citizens and the interest of the collectors would be placed in opposition to each other.

Mr. Bourne, of Rhode Island, hoped the motion would not be agreed to. He thought it a necessary regulation. No inconvenience, it was true, had occurred in the State he represented, but he believed they were liable to inconveniences from the want of such a law as this. By the aid of custom-house officers, who had concurred with the State, they had been able to effect every necessary regulation; but if these officers had refused them aid, they could not have stopped vessels with infectious diseases from coming into port—it being of the nature of a commercial regulation, to which, by the Constitution, Congress alone were competent. Without the first clause there would be a radical defect in the bill.

Mr. Swanwick, of Pennsylvania, said if the section were struck out the bill would have every desirable effect. All that was complained of was that the authority of any individual State could not compel vessels to perform quarantine; but if the President gave directions to the officers of the United States at every port to aid the State governments in this respect, every effect would be obtained. The first section of the bill went only to direct the time during which quarantine should be performed, and at what particular place, which would certainly be best determined by the State governments. Indeed, most of them having already fixed on places for the purpose, and erected suitable buildings for the sick, for purifying goods, &c., it would be attended with very great inconvenience if a different place were to be fixed upon by the United States. It was said the right of regulating quarantine did not reside in the State governments; he believed it did, and that the individual States had conceived so was evident from the expense which some of them had been at in erecting buildings, &c., for the purpose. He particularly alluded to the provisions made for this purpose by the State of Pennsylvania, on the Delaware.

Mr. Sitgreaves, of Pennsylvania, would ask his colleague to point out the inconveniences which would arise from passing the law in its present state. It was true that the State of Pennsylvania had made some regulations on the subject of quarantine; but, without the aid of the United States, they could not carry them into effect. They may direct, by their governor and board of health, quarantines to be performed, but they could not enforce any vessels to observe their directions, without the aid of the general government. Some States had, on this subject, no institutions at all; and where they existed it was reasonable to suppose that they would be properly respected by the President in the arrangements he should make under a law like the present. At any rate, no inconvenience need be apprehended from an exercise of a concurrent jurisdiction. If a State should direct one term of quarantine to be performed, and the President another, the longest term, which will comprise both, must be submitted to. But the strongest and best reason for a law such as the one proposed, is that it is matter of very serious doubt whether, upon this subject, the States had any authority at all, and whether all such power is not vested by the Constitution in the Congress, under their general authority to regulate commerce and navigation. He inclined to the last opinion, and believed, upon examination, it would appear to be well founded. On the whole, the provision contemplated might produce good effects, and could not be followed by any evil consequences, and therefore he should vote for it.

Mr. Milledge, of Georgia, spoke in favor of striking out the first section, and of the power of regulating quarantine being in the State governments. Savannah, in Georgia, he said, was one thousand miles from the seat of government, and, from their situation in respect to the West Indies, they were very subject to the evil of vessels coming in from thence with diseases; and if they were to wait until information could be given to the President of their wish to have quarantine performed, and an answer received, the greatest ravages might in the mean time take place from pestilential diseases. The State of Georgia had a long law on the subject, and had always been in the habit of regulating quarantine without consulting the general government.

Mr. Bourne, of Rhode Island, spoke again in favor of the bill. It had been objected against the bill that the State might order quarantine to be performed for one length of time and the general government another; that difficulty would be got over by observing the longest period.

Mr. Giles, of Virginia, said there appeared to him several inconveniences attending the bill. The gentleman last up stated that if a longer time was ordered for quarantine to be performed by either the State or general government it should be obeyed in preference to the shorter. He believed this would not prove satisfactory. But how did the gentleman propose to get over the difficulty of different places being appointed by the two governments? If, said he, the States had already fixed upon times and places of performing quarantine, he thought it necessary for the general government to interfere in altering them. He thought both time and place should be fixed by the State; but if it were the business of the general government, it was legislative and not executive business. It was said some of the States had no regulations with respect to quarantine; but, if they had not, when they found a necessity for them they would have them. It had been said that every useful purpose would be answered by the last

clause; why, then, retain the first, against which there are so many strong objections? He hoped it would be struck out.

Mr. Kittera, of Pennsylvania, asked if a State should think it necessary to change the place of performing quarantine whether the President could always have notice of the change in time, so as to make his regulations accordingly. He believed not. This would be one of the inconveniencies which would arise from the first clause. He thought the second would answer every desirable purpose.

Mr. Smith, of Maryland, said that gentlemen who opposed the present bill insisted upon the authority to regulate quarantine being in the State governments. The gentleman from Pennsylvania (Mr. Swanwick) said that each State had its buildings for the purpose. This was not a fact. Some of the States had no regulations on the subject. At Baltimore they had built a hospital four miles from the port, but the State had no authority to stop vessels at it. He asked the gentleman from Georgia (Mr. Milledge) whether there was any power in that State which could stop a vessel of his from going into Savannah though she had sickness on board? He denied that it had. She will sail into port in defiance of their State laws. It was a commercial regulation, and, therefore, the business of the general government. Mr. S. said he brought in this bill that the regulations respecting quarantine might be authorized by the proper authority. It could not be supposed that the President would alter the places already fixed upon by the individual States without such good reasons as would convince them of its necessity. To suppose the contrary was an unworthy suspicion that the Executive would abuse his power. There were States which had no laws upon the subject. Maryland had a law which had been sanctioned by a law of the general government, and had been renewed this session.

Mr. Williams, of New York, observed that the gentleman last up had said that regulations respecting quarantine were commercial regulations, and therefore vested in the general government. The State of New York had never found any difficulty in causing vessels to stop at a certain place to perform quarantine. Philadelphia and New York had had occasion to make alterations with respect to the proper places of stopping, and they were certainly the best judges as to the propriety of those alterations. It appeared to him that the second clause would answer the purpose wanted. Not that he was by any means jealous of the power of the President, but he believed it would be best for the States to have the power of directing the time and place of performing quarantine, as they could more effectually carry their regulations into effect. The second clause directs that the officers of the general government shall aid State governments, which is all that is necessary.

Mr. W. Lyman, of Massachusetts, thought the individual States had the sole control over the regulations of quarantine. It was by no means a commercial regulation, but a regulation which respected the health of our fellow-citizens. In the town of Boston the small-pox was considered as pestilential disease, and they certainly had a right to make their regulations accordingly. He knew the United States could prohibit the importation of goods, but he did not think it was in the power of the United States to prevent the landing of persons. He believed the bill was unnecessary; that individual States had a right to make such regulations as were necessary for the preservation of the health of their citizens.

Mr. Hillhouse, of Connecticut, said if gentlemen had been as near infectious disorders as he had been, they would have been convinced of the necessity of making some such regulations as were now proposed. He was not surprised that gentlemen who lived several hundred miles from the shore did not feel anxious about the matter. He thought it was an object which merited the attention of Congress. He knew there were local regulations in many States relative to this subject, which he did not wish to destroy. Gentlemen might as well say that the individual States had the power of prohibiting commerce as of regulating quarantine, because, if they had the power to stop a vessel for one month, they might stop it for twelve months. This might interfere with regulations respecting our trade and break our treaties. At the same time, he allowed that the States were the best judges of time and place. Mr. H. proposed two amendments. One was, that the President should make regulations where individual States had not already done it; the second was to make it the duty of officers of the United States to assist the State governments to carry into effect their several laws, until Congress shall make regulations to the contrary.

Mr. Gallatin, of Pennsylvania, said he did not agree in the least with the gentleman from Maryland (Mr. Smith), that the power of regulating quarantine was exclusively in the United States. He conceived the only clause in the Constitution which could at all countenance such an idea was the article relative to commerce; but, he said, the regulation of commerce had nothing to do with commerce. It was a regulation of internal police. It was to preserve the health of a certain place, by preventing the introduction of pestilential diseases, by preventing persons coming from countries where they were prevalent. Whether such persons came by land or by water, whether for commerce or for pleasure, was of no importance—they were all matters of police. The individual States had thought themselves competent to prevent the introduction of slaves coming by sea, although that also might be called a commercial regulation, which they had no right to interfere with. And if a vessel belonging to the gentleman from Maryland was to come to the ports of Baltimore or Philadelphia with a cargo of negroes, he believed that the government of either place would be equal to the preventing of him from landing and disposing of them, though he would say it was an article of commerce. The State governments had also something to do with the internal regulations of their ports. That of Philadelphia was under the direction of wardens and of State laws. He had no objection to the United States assisting the individual States in enforcing their quarantine regulations, but he had an objection to their asserting that they had the sole right of making regulations on that head, or of making health laws for the individual States. He knew that where the legislatures of different States had legislated on the subject they had thought it an important branch of their duty. The words proposed to be introduced by the gentleman from Connecticut—"until Congress shall make regulations to the contrary"—seemed to say that the health laws of the several States were to continue only during the pleasure of Congress, but if the assistance of the United States was only necessary, the amendment of his colleague (Mr. Heister) would answer the purpose.

Mr. Smith, of Maryland, said the gentleman from Pennsylvania, Mr. Gallatin, differed in opinion from him with respect to the States having the power to stop vessels coming into their ports. It was true that the laws of the States of Maryland and Pennsylvania prohibited the importation of slaves, but a vessel might bring any quantity of negroes, provided, on landing, they were not sold. It has been said that the governor of Pennsylvania had stopped vessels from entering this port which were suspected of having diseases on board. That was, he said, before the fort was ceded to the Union. He had not the power now to do it. That such authority had been submitted to was true and proper, but he had no legal right to stop any vessel. The individual States make health laws, but they want the power to carry them into execution; they are good for nothing without such power. That the State of Pennsylvania had passed a health law and carried it into effect was no proof against his assertion. The law which he had now brought forward was meant to give full effect to the State laws. He had no objection to the amendment of the gentleman from Connecticut.

Mr. W. Lyman, of Massachusetts, observed that the gentleman from Maryland did not make the proper distinction. Quarantine was not a commercial regulation; it was a regulation for the preservation of health. If commerce was incidentally affected, it ought so to be, when the object was the preservation of health and life. The United States, it was true, could prevent the importation of any goods, whether infected or not, but it did not thence follow that they could permit the landing of infectious goods contrary to the laws of any State. The several States possessed the sole power over this subject. They were the best judges of the due exercise of it. The right to preserve health and life was inalienable. The bill was not only unnecessary and improper, but it was injudicious interference with the internal police of the States; neither would the amendment which had been offered by the gentleman from Connecticut (Mr. Hillhouse) ameliorate the bill; it would still be interfering with State policy. If that gentleman had any panics about infectious diseases, he might find relief in the laws of the State. If the laws there were not competent thereto at present, the gentleman might remonstrate to their legislature, and no doubt could exist but he would be suitably listened to. As to the argument that States neglected to make regulations, it proved that they supposed them superfluous. Whilst they forbear to do anything, it was proof that nothing ought to be done. The States are the best judges, and had the sole power to determine.

Mr. Kittera, of Pennsylvania, said his objections to the bill would be removed by the amendments of the gentleman from Connecticut. The only point in which they seemed to differ was, whether the President of the United States, or the government of each individual State, was best able to make the wisest regulations? If the first section passed, the President would most probably adopt the regulations of the different States; and, by the second, the officers of the United States are commanded to aid in the execution of the State laws.

Mr. Heath was in favor of striking out the first section; he was, in fact, opposed to the whole bill.

Mr. Hillhouse, of Connecticut, said the first clause might be struck out. It was only necessary where no regulation was made. It was said that a regulation of quarantine had nothing to do with trade, but if a State, in order to prevent the introduction of certain goods from a certain country, were to order a quarantine of twelve months to be performed, would it not be destructive of commerce? It certainly would; and if a State had the power of stopping a vessel one month she can extend it twelve, if she pleases.

Mr. Giles, of Virginia, said he did not know which States had legislated on this subject, and which had not. He did not know that any of the States had not legislated upon it; but if they had not done it, they could do it. The gentleman from Maryland (Mr. Smith) had said, to regulate quarantine was a commercial regulation. They were legislating, not upon commerce, but upon preventing the introduction of pestilential disorders. Were these objects of commerce? If a State stops a ship, she does not stop it on account of the goods it contains, but because it contains an infectious disorder, which, if it were considered as an article of commerce, certainly ought, at least, to be a contraband article. He did not believe there was any necessity of interference; but, if there was any want of ability to enforce obedience to the laws of the State, he had no objections to fur-

nish it, and that would be done by the proposition of the gentleman from Pennsylvania (Mr. Heister).

Mr. Swanwick, of Pennsylvania, said, if it were to be admitted that the general government were to take upon it the regulation of health, he would ask whether the first section of the present bill contained any regulation of this sort? The State of Pennsylvania, he said, had been at great expense in erecting necessary buildings for the reception of persons and goods infected with diseases. It was to be lamented that gentlemen had not before found out that this was the business of the general government, for it had been a very expensive undertaking to the State of Pennsylvania to provide the necessary buildings for carrying their quarantine and health laws into execution, and they would gladly have turned it over to the United States. He thought the utility of this business remaining in the State government was evident. Commercial regulations were placed in the general government to prevent one State having advantages over another in respect to commerce; but with respect to health, every State was certainly the best judge, and the claim was imperious; and if it were under the power of the general government, and government was to neglect to take the necessary measures, the State would itself take them. During the late sickness at New York it was thought necessary to appoint special committees to aid the State government in this city. The gentleman from Maryland had asked if a State government could stop a vessel from entering any of its ports? If not, they had been infringing on the laws for several years. The governments of New York and Pennsylvania were in the constant habit of preventing ships from entering their ports until they had been examined with respect to their healthiness. Gentlemen had talked about their abode being near or distant from seaports. He could see no use in such observations. It was certainly of first consequence to guard the health of their citizens by every possible means. He said at this port they had laws respecting wardens; there was also in the different States inspection laws, which in some degree affected commerce, but were not the kind of regulations prohibited by the Constitution; these did not interfere with the rights of Congress to regulate commerce. Gentlemen had brought another subject into view, which he could not see any good reason for doing; they had charged gentlemen opposed to this law with being unreasonably jealous of the power of the Executive. Surely, to prevent the landing of diseased persons, or infected goods, could not have any relation to a jealousy of that power. This subject was too often introduced, when, he believed, there was no real occasion for it, though he hoped they never should be wanting in entertaining any justifiable jealousy of the extension of any of the powers of government, if these should be conceived to have been improperly exercised, buthe knew of nothing of this kind at present.

Mr. Smith, of South Carolina, said if this question be a mere question of acquiescence in the State laws there might be a propriety in the Federal government overlooking those laws; but it was essentially connected with the powers of Congress on an important subject. He had been surprised to hear gentlemen assert that this subject was not of a commercial nature. The gentleman from Virginia (Mr. Giles) had said diseases were not articles of importation, or, if they were, they were contraband; but gentlemen must know that importations of all kinds were under the regulation of Congress, and contrabands as much as any other. Consider how epidemical diseases, imported, affect the United States at large. They do not merely affect the city where first imported, but they obstruct the commerce of all others; they not only embarrassed the commerce, but injured the revenues of the United States. Another point of view in which it had an effect: The laws regulating the collection of imports were counteracted and obstructed by the laws regulating quarantine, and would any gentleman say that a State legislature had the power to contravene the act of the Federal government to obstruct all the laws by which it collects its revenues? It had been said that this subject could be better considered in each individual State than we could possibly settle it. Who are we? Are we a foreign government? Gentlemen had already forgotten their arguments on former occasions when speaking of the power of the House; they could then do anything and everything; and the people looked up to them alone for protection. If the subject was vested in the general government it was their business to protect the health of their fellow-citizens as much as their property; because, if the performance of quarantine was neglected such neglect naturally tended to affect the lives as well as the revenue and commerce of the citizens throughout the United States. He, therefore, thought it a subject perfectly within the Federal jurisdiction; and as there were States which had no law upon the subject, and as their legislatures had now generally risen, the passing of this law would prevent the necessity of resorting to revolutionary committees of their citizens. Their refusing to legislate upon this occasion would be inviting the people to do the business by committees. The gentleman from Pennsylvania (Mr. Swanwick) had referred to the laws of that State. He thought they had some very exceptionable laws: in particular, their poll-tax on persons coming by water into their State. He thought it would be deviating from the spirit of the Constitution.

Mr. Page, of Virginia, said he should vote for striking out the first section. He should even wish to vote against the bill itself, as it was an attempt to extend the power of the Executive unnecessarily. We might as well undertake to form a system of police for every city in the Union. The State legislatures could not be interested in opposing the landing of goods any more than Congress, and therefore would not be disposed to do it, except when their health would be endangered by it; but if he were to put in competition the interest of the revenue and the right of the people to preserve their health, which was one of the first rights of nature, he should certainly adhere to the latter at the expense of the former. The master of the vessel who refused to stop at the port of Baltimore, agreeably to the orders of the State government, might have been prosecuted at common law. If gentlemen had no other object in view besides the preservation of the health of their citizens, they ought to be satisfied with the second clause, which went to the directing of the officers of the United States to aid the State government in obliging vessels to perform the necessary quarantine. The first clause had only a tendency to extend the prerogative of the President.

Mr. Bourne, of Rhode Island, said gentlemen supposed it to be the duty of the President to co-operate with the individual State governments with respect to the performance of quarantine; but he believed the States would think it an improper interference except he were authorized by law. It was a duty of the President, expressly enjoined by the Constitution, to execute the laws of the Union, but it was not to execute the laws of the State. The gentleman last up had observed that self-preservation required that every State should attend to its own health; but it must be allowed without some check in the United States that the commerce and revenues of the United States were liable to be materially affected by the regulations relative to quarantines; for if the State governments were once allowed to have the power of stopping vessels to perform quarantine, they might prohibit the commerce of any country at pleasure; the vessels from any particular country might be stopped for so long a time, or totally prohibited so as to ruin the commerce with such country on pretense of the vessels containing diseased cattle or other infections. It would be said that this would be an abuse of the power which could not be expected, but if the States had the power they could exercise it as they pleased. If they had the power of regulating quarantine they could not carry it into effect without the aid of the United States, who alone possess the power of regulating navigation and commerce. And he believed that no damages could be recovered (as the gentleman from Virginia supposed) against any master of a vessel who had refused to obey the laws of any State with respect to the performance of quarantine, unless the authority of the United States should interpose by making some legal provision for their being carried into effect so far as they may relate to commerce and navigation.

Mr. Holland, of North Carolina, said that in an inquiry into the subject whether the general government or State legislatures were the best judges of the measures necessary to be taken for the preservation of the health of the several States, it would occur that, the extent of the country being so great, it would be difficult to say what regulation would be best suited to all the ports of the Union, for what would be salutary and proper for one might be improper for another. From this circumstance it would seem that each State should have the power to pass its own laws on this head, and, if so, the first clause should be struck out; to preserve one's health was an article of self-defense. Every individual should take his own measures to preserve his own health, and each State should judge of the best way of doing it for its own districts. He had no objection to the calling in of the aid of the general government to the execution of the State law, but not to regulate the time and place of performing quarantine. This was contemplated in the second resolution, and the first was therefore unnecessary. The Constitution being silent in respect to health laws, he supposed the passing of them was left to the States themselves. Those who yet have no laws on this subject will make them when necessary. The question, in his opinion, was by no means a commercial one. The gentleman from Maryland, being a commercial man, may be excused from considering it as one, as he readily converts most things into a commercial view.

Mr. Brent, of Virginia, was in favor of striking out the first clause of the bill under consideration, not from any jealousy of the Executive, but because the Constitution did not authorize such an interference. If the doctrines of the gentlemen from Maryland and South Carolina were true, they would swallow up all of the authority of the State governments. They had suggested that if the State legislatures had the power they might use it so as to injure the general government. He would ask whether this would prove that they did not possess the power? If they possessed the power and exercised it so as to injure the interests of the United States, the Constitution of the Union, he believed, would point out a remedy. The gentleman from South Carolina had said that if the State governments were possessed of this power they might impair the revenue of the United States, and that, therefore, being connected with commerce, the regulating of quarantine must be in the power of the general government. He would ask whether the different States had not the power of regulating the inoculation for the small-pox? Yet this might be so ordered as to affect the trade and commerce of this country, and yet no one would say they had not the power of doing this. If the construction now contended for was carried to its extent, there would be no bounds to it. The States had always been considered as possessing the power of regulating quarantine. Such

was the opinion at the time of adopting the Constitution, and under this impression the States had passed laws on the subject; nor did he believe that necessity, expediency, or policy required that the power should be changed. If this was the case, the question could only be brought forward for the purpose of establishing a constitutional principle, and which he should certainly oppose.

The question for striking out the first section was put and carried, 46 to 23; and the bill was ordered to be engrossed for a third reading.

Friday, May 23, 1796, the bill relative to quarantine was read a third time and passed.

In the Senate, Tuesday, May 24, 1796, Mr. Rutherford, of New Jersey, from the committee to whom was referred the bill sent from the House of Representatives, for concurrence, entitled "An act relative to quarantine," reported that the bill be amended by inserting, after the word "that," "until general regulations relative to quarantine are made by law." And on the question to agree to the report it was determined in the negative.

Wednesday, May 25, the bill was read a third time and passed.

Approved May 27, 1796.

(To be continued.)

ABSTRACTS FROM CONSULAR REPORTS.

MONTEVIDEO, URUGUAY.—United States Consul A. L. Russell reports for the month of August a total of 253 deaths, of which 3 were from typhoid fever.

NASSAU (N. P.), BAHAMAS.—United States Consul T. J. McLain, jr., reports that no case of yellow fever has occurred since October 1, and states that disease appears to have left the island entirely.

PARA, BRAZIL.—United States Consul N. C. Prindle, under date November 18, 1880, reports that city as healthy, with no suspicion of any contagious disease.

SANTIAGO DE CUBA, CUBA.—United States Consul John C. Landreau reports that for the month ending October 31 there was a total of 186 deaths. Of yellow fever there were 74 cases and 43 deaths; of small-pox, 39 cases and 17 deaths; of typhoid fever, 16 cases and 5 deaths. The cases of yellow fever occurred mostly among the troops, who are Spaniards. He also states that the harbor and vicinity still continue void of either yellow fever or small-pox, and therefore he issues bills of health to captains who call for same, bound to the United States, according to the health on board.

SINGAPORE.—United States Consul A. G. Studer reports, under date of October 18, that there has been no epidemic or contagious disease in his consular district since his last report.

VERA CRUZ, MEXICO.—United States Consul S. T. Trowbridge reports that for two weeks ending November 14 there were 69 deaths, of which 36 were from yellow fever. Total number of deaths for October, 153; yellow fever, 43. He states that the city was entirely free from yellow fever until the pavements were torn up to repair a street railroad, a belt ¼ mile long by 12 feet wide through the center of the city. Simultaneously with the commencement of that work the disease appeared.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

DUBLIN, IRELAND.—Dr. Charles A. Cameron, F. R. C. S. I., forwards his report upon the state of public health in Dublin and the sanitary work performed there during the five weeks ending October 30, 1880. The death rate in the city during this period was 36.42 per 1,000 per annum, the total number of deaths from all causes being 857. Of these the deaths from the seven principal zymotic diseases were as follows: Small-pox, 6; whooping cough, 30; measles, 13; scarlet fever, 52; fevers, 27; diarrhœa, 71; diptheria, 2; all other zymotic diseases, 29; making a total of 230. The month was one of the coldest October on record, and the rainfall largely excessive, being over one-third of the usual annual precipitation. Several of the low-lying districts of the city and suburbs were flooded and many houses had to be vacated.

The severe weather produced an increase in the number of deaths from diseases of the organs of respiration.

HAVANA, CUBA.—During the week ending November 19, there were 5 deaths from yellow fever, four of which were among civilians, and but 1 in the military hospital.

Of small-pox 7 cases have been reported during the same period.

Two cases of yellow fever are reported to have occurred among the passengers on board the steamship City of Merida, while *en route* from Vera Cruz to Havana. One died; the other is now in hospital in Havana, having had black vomit, &c.

TUXPAN, MEXICO.—Under date of November 1, Dr. A. M. Boyd reports that, for the month ending October 31, the number of deaths from all causes was 22, viz, consumption, 2; diarrhœa, 1; dysentery, 1; convulsions, 3; malarial fever, 13; dropsy, 1; asthma, 1. Rate per 1,000 of population, 36.7.

He also states that the yellow fever season has passed and there has not been a single case, nor anything that resembles it, during the season, nor has there been any other disease of a contagious character. The sanitary condition of the port and vicinity is good.

The health officer of Yonkers, N. Y., Dr. Valentine Brown, states under date of November 20, 1880, that no deaths have been reported in that city for the eleven preceding days, and that only 20 deaths have been reported in fifty days ending on the above date. Malarial fevers seem to have disappeared and the city could be considered as free from all zymotic diseases. He attributes the exemption of Yonkers from any decided disease movement to the locality, water-supply, natural drainage, &c.

FEES FOR MEDICAL EXAMINATIONS ON BOARD OF VESSELS BOUND FROM FOREIGN PORTS TO PORTS WITHIN THE UNITED STATES.

The attention of consular officers is called to the following communication of the honorable Secretary of the Treasury, fixing the fees to be charged for medical examinations which may be made in their respective districts:

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. C., November 29, 1880.

SIR: Your lettter of the 23d instant is received, in relation to a proposed schedule of fees to be substituted for the fee of twenty-five (25) cents for each person, established by department letter to you of September 1, 1879, for the medical examination of persons on vessels in foreign ports about to sail for ports in the United States.

You state that you are directed by the executive committee of the National Board of Health to say that, in its opinion, the proposed schedule is just and equitable, and will doubtless secure in each case an amount adequate to the expense incurred.

The department, therefore, directs that the letter of September 1, 1879, be so far modified as to prescribe fees for the personal examination authorized by the "act to prevent the introduction of contagious or infectious diseases into the United States," approved June 2, 1879, as follows:

Fees for medical examination of persons on vessels bound from foreign ports to ports in the United States—

For fifty persons and under	$5 00
From fifty to one hundred persons, for each ten additional persons or less	1 00

Over one hundred, at the rate rate of $5 for each additional hundred persons.

In the cases which have arisen at the port of Kanagawa, Japan, the fees will be adjusted and settled on the basis of the above schedule.

Very respectfully,

JOHN SHERMAN,
Secretary.

Hon. J. L. CABELL,
President National Board of Health, Washington, D. C.

NOTICE.

The United States consul at Londonderry, Mr. Arthur Livermore, under date of November 9, 1880, reports the existence of twenty-five (25) cases of typhus fever at that port. In his communication Mr. Livermore alludes to the disregard by shipmasters of the requirments in regard to obtaining a bill of health. The attention of quarantine officers is respectfully called to all vessels arriving with passengers from the above port without bills of health, and it is requested that notice may be given this office, at as early a date as possible, of any attempt at evasion of the act to prevent the introduction of contagious and infectious diseases into the United States, approved June 2, 1879.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 20, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me.....Portland	34,000	1	6	9.2	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bangor	16,780	.....	1	3.1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H.....Concord	14,000	.....	3	11.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt.....Burlington	16,500	.....	3	9.5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass....Boston	375,000	38	140	19.4	29	7	.....	19	3	.....	2	.....	26	.....	2	.....	1	39	9
Cambridge	52,800	6	15	13.6	2	1	1	.....	.....	.....	1	.....	4	.....	.....	.....	.....	3	.....
Edgartown	1,294	...	1	40.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,268	1	12	23.0	2	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	4	2
Newburyport	13,800	1	4	14.9	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	3	5	34.9	1	.....	...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,726	.....	1	13.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	48,000	5	23	24.4	8	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Lowell	59,485	14	28	24.5	3	4	1	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	6	1
Lawrence	39,000	5	17	22.7	6	.....	1	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1
Worcester	58,000	7	17	15.2	1	.....	.....	.....	.....	1	2	.....	3	1	.....	.....	.....	.....	.....
Lynn	38,400	9	15	20.4	3	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brockton	13,608	.....	2	7.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	21,851	.....	6	14.2	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,620	.....	1	14.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,200	.....	3	17.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,000	2	5	23.9	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	1	3	12.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	2	7	14.6	1	.....	1	.....	1	.....	.....	.....	3	.....	.....	.....	.....	2	.....
Springfield	33,000	2	6	9.5	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
R. I.....Providence	104,862	9	33	16.4	10	2	.....	.....	.....	.....	1	.....	2	.....	2	.....	2	5	1
Conn....New Haven	63,000	4	29	23.6	5	1	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	4	.....
New Britain	13,978	.....	3	11.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,300	2	5	12.9	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. Y.....New York	1,203,823	225	546	23.5	79	25	16	51	9	6	31	.....	92	1	5	1	3	157	20
Brooklyn	566,689	117	261	24.1	33	15	3	50	.....	8	6	.....	44	.....	.....	.....	1	87	7
Yonkers	19,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poughkeepsie	20,200	1	3	7.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburgh	18,043	5	10	29.0	1	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Rochester	90,000	10	39	22.6	6	2	.....	3	1	.....	1	.....	3	.....	.....	.....	.....	7	2
Buffalo	155,159	26	58	19.4	4	4	1	7	.....	.....	2	.....	3	.....	.....	.....	.....	15	1
Watertown	10,666	.....	2	9.8	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Cambridge	1,850	1	1	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	.....	2	17.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Port Jervis	3,276	...	1	4.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J.....Hudson County	209,000	28	70	17.5	1	8	2	1	1	.....	.....	.....	9	.....	5	...	.....	14	3
Newark	138,000	22	62	23.7	7	5	.....	6	.....	1	.....	.....	3	.....	.....	.....	.....	9	2
Orange	13,206	1	3	12.0	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Camden	41,714	6	14	17.5	.....	.....	1	1	.....	.....	.....	.....	2	.....	.....	1	.....	5	1
Plainfield	8,160	1	1	6.5	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa.....Philadelphia	850,000	95	309	18.9	46	4	.....	10	11	1	6	.....	18	.....	.....	20	.....	.....	.....
Pittsburgh	156,649	26	55	18.0	7	1	.....	11	1	.....	4	.....	2	1	.....	.....	2	20	3
Erie	28,565	5	11	20.4	1	..	.....	.....	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....
Del.....Wilmington	44,000	5	15	18.4	3	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Md.....Baltimore	393,796	44	140	18.5	28	4	.....	3	6	3	9	.....	13	.....	1	.....	2	29	3
District of Columbia	180,000	23	65	18.8	7	2	2	8	2	.....	2	.....	10	.....	1	.....	.....	19	5
Va.....Norfolk	26,200	6	9	18.2	1	.....	.....	3	1	.....	.....	.....	..	.....	.....	.....	.....	4	.....
Richmond	65,000	12	29	23.5	6	.....	.....	.....	2	.....	.....	.....	2	.....	.....	.....	1	4	1
Lynchburg	16,500	1	3	9.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. C.....Wilmington	17,600	3	8	23.8	2	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C.....Charleston	57,000	10	28	25.5	3	.....	2	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Ga.....Augusta	27,012	5	11	21.3	1	.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Atlanta	38,000	9	17	23.0	1	.....	2	.....	2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Rome	5,000	1	2	20.9	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla.....Jacksonville	10,000	1	6	31.3	2	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	3	4	17.4	..	.....	.....	.....	.....	.....	.....	1	.....	.....	2	.....	.....	.....	.....
Ala.....Mobile	40,000	7	21	27.3	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Selma	7,505	1	3	20.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Miss....Columbus	5,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	3	5	36.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	1	4	16.7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
La.....New Orleans	216,359	36	112	27.0	22	.....	4	3	.....	6	1	.....	7	.....	1	.....	.....	2	.....
Shreveport	8,033	2	7	45.7	1	.....	.....	.....	.....	3	.....	.....	1	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	.....	2	14.5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex.....San Antonio	20,597	4	7	17.7	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Austin	16,000	.....	2	6.5	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Galveston	22,368	3	8	18.7	1	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ark.....Little Rock	22,000	2	6	14.2	3	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Tenn....Nashville	43,543	3	11	13.0	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Clarksville	7,250	1	5	36.1	2	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,850	.....	2	27.6	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Memphis	34,000	10	29	44.4	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2
Shelbyville	1,919	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky.....Louisville	175,000	11	32	9.5	3	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	3	1
Ohio.....Cincinnati	280,000	22	90	16.8	10	3	4	3	9	.....	3	.....	8	.....	.....	.....	2	28	4
Cleveland	175,000	....	37	11.0	2	3	1	3	2	.....	.....	.....	5	.....	.....	.....	.....	.....	1
Gallipolis	4,500	.....	3	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Dayton	39,000	.....	7	9.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Portsmouth	11,320	1	2	9.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind.....Indianapolis	75,350	6	24	16.4	4	.....	3	2	1	.....	.....	.....	2	.....	.....	.....	.....	.....	6
Richmond	13,000	6	7	28.9	1	1	...	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Evansville	30,000	1	7	12.2	2	.....	1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill.....Chicago	503,298	73	176	18.2	9	20	3	19	3	1	3	.....	16	.....	2	.....	.....	56	10
Peoria	34,850	3	14	20.9	5	1	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	3	1
Aurora	12,059	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	3	5	17.5	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Elgin	8,770	1	2	11.9	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Moline	8,200	1	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 20, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Wis ....Milwaukee	115,761	29	52	22.4	3	2	1	6	2	.....	10	.....	4	1	1	.....	.....	22	.....
Minn ....Saint Paul	41,800	7	13	16.3	1	.....	.....	.....	3	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Mich .... East Saginaw	19,065	.....	2	5.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Iowa....Keokuk	12,125	.....	1	4.3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr ....Omaha	31,000	3	4	6.9	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Kans ....Lawrence	8,500	1	5	30.1	1	.....	.....	.....	.....	3	.....	.....	1	.....	.....	.....	.....	.....	.....
Colo.....Boulder	3,030	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah....Salt Lake City	25,000	7	7	14.6	.....	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Cal .....San Francisco	233,700	29	96	21.4	16	2	4	.....	1	1	1	.....	7	.....	1	6	.....	18	.....
Sacramento	21,500	3	6	14.6	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	1	3	14.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Vallejo	7,000	3	5	36.8	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Totals	7,966,538	1,088	3,004	19.5	422	133	71	224	68	44	90	1	220	4	24	28	15	575	93

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING NOVEMBER 20, 1880.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass ....Boston	370,000	5,000	137	3	19.3	31.3
R. I.....Providence	101,062	3,800	30	3	15.5	41.2
Del .....Wilmington	38,000	6,000	12	3	13.3	25.1
Md .....Baltimore	338,384	55,412	104	36	16.0	34.0
District of Columbia	120,000	60,000	35	30	15.3	26.0
Va.....Norfolk	14,900	11,300	4	5	14.9	23.1
Richmond	37,970	26,699	14	15	15.5	29.5
S. C ....Charleston	25,000	32,000	16	12	33.3	19.5
Ga.....Augusta	16,182	10,830	6	5	19.4	23.4
Atlanta	22,000	16,000	12	5	28.5	18.3
Brunswick	1,500	1,400	.....	.....	.....	.....
Fla .....Jacksonville	6,000	4,000	4	2	34.8	26.1
Key West	8,000	4,000	2	2	13.0	26.1
Ala.....Mobile	28,000	12,000	6	15	11.2	65.3
Selma	3,425	4,080	1	2	15.2	25.5
Miss.... Columbus	2,740	2,560	.....	.....	.....	.....
Natchez	3,500	3,500	1	4	14.9	59.6
La.....New Orleans	159,128	57,231	66	46	21.6	41.9
Shreveport	3,916	4,117	4	3	53.4	38.3
Baton Rouge	2,954	4,233	.....	2	.....	24.6
Tex.....Austin	12,000	4,000	2	.....	8.7	.....
Galveston	17,064	5,244	7	1	21.1	9.9
Tenn ....Nashville	27,874	15,669	5	6	9.2	19.8
Clarksville	4,600	3,250	1	4	13.0	64.2
Memphis	17,293	16,707	11	18	33.2	56.2
Murfreesboro'	2,000	1,850	2	.....	52.2	.....
Ky .....Louisville	153,125	21,875	17	15	5.8	36.7
Ohio.....Portsmouth	10,320	1,000	1	1	5.1	52.2
Iowa ....Keokuk	11,165	960	.....	1	.....	54.4
Kans ....Lawrence	6,800	1,700	4	1	30.7	30.7
Totals	1,564,272	396,417	502	238	16.8	31.5

The following reports, for the week ending October 2, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 2. Allegheny, Pa., 78,000; deaths, 28; under 5 years, 15; consumption 3, croup 1, diphtheria 3, enteric fever 1, scarlet fever 3, lung disease 3, accidents 1. Belfast, Me., 5,308; death, 2; under 5 years, 1; diphtheria 1. Brattleboro', Vt., 6,000; deaths, 3; under 5 years, 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 1; consumption 1. Circleville, Ohio, 6,400; deaths, 3; under 5 years, 1; croup 1, diphtheria 1, lung disease 1. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; no deaths. Dallas, Tex., 10,365; deaths, 4; under 5 years, 1; diarrhœa 1, lung disease 1, accident 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Helena, Mont., 3,630; deaths, 4; under 5 years, 3; diphtheria 2, lung disease 1. Hernando, Miss., 1,000; death, 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251: no deaths. Kenosha, Wis., 5,500; deaths, 3; diphtheria 1. Lebanon, Pa., 9,000; deaths, 3; puerperal 1, accident 2. Madison, Ind., 9,009; deaths, 8; under 5 years, 4; diphtheria 1, malarial fever 2, scarlet fever 1, puerperal 1, accident 1. Martinsburg, W. Va., 6,384; deaths, 2; under 5 years, 1; consumption 1, croup 1. Milledgeville, Ga., 3,000; deaths, 2; consumption 1. Monmouth, Ill., 6,000; deaths, 3; under 5 years, 2; diphtheria 1, accident 1. Montgomery, Ala., 17,000; deaths, 2; puerperal 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 2. Muscatine, Iowa, 8,412; deaths, 2; consumption 1. Muskegon, Mich., 11,300; deaths, 6; under 5 years, 3; diphtheria 2, malarial fever 1, accident 2. Nebraska City, 5,000; deaths, 2; under 5 years, 1; diphtheria 1. Niles, Mich., 4,100; death, 1. Painesville, Ohio, 5,504; death, 1. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; no deaths. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; death, 1. Port Gibson, Miss., 1,200; no deaths. Rock Island, Ill., 12,000; deaths, 5; under 5 years, 3; enteric fever 1, scarlet fever 1, lung disease 1. Rockland, Me., 7,500; deaths, 4; under 5 years, 3; consumption 1, lung disease 2. Ripley, Miss., 1,000; no deaths. Santa Cruz, Cal., 5,000; no deaths. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; death, 1. Summit, Miss., 1,808; no deaths. Tampa, Fla., 740; death, 1. Titusville, Pa., 9,000; deaths, 5; under 5 years, 2; croup 1, lung disease 2. Tuscaloosa, Ala., 2,000; deaths, 3; diphtheria 2, lung disease 1. Winchester, Va., 5,000; deaths, 1; under 5 years, 1; lung disease 1. Winona, Minn., 10,000; deaths, 2. Youngstown, Ohio, 15,089; death, 1; under 5 years, 1; croup 1. Total population, 335,583: deaths under 5 years, 43; total number of deaths, 109; annual rate per 1,000, 16.9.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NATIONAL BOARD OF HEALTH rooms, 1410 G st. N. W.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, DECEMBER 11, 1880. [No. 24.

THE ORIGIN AND GROWTH OF THE QUARANTINE SYSTEMS OF THE UNITED STATES.

NATIONAL LEGISLATION—Continued.

By STEPHEN SMITH, A. M., M. D., of New York.

Although the single section of the bill reported, and finally adopted, in 1796, was the first act of Congress relating to quarantine, a motion was made in the First Congress looking to the establishment of health officers in the several ports of the Union, as appears from the following extract from the proceedings of that body:

On the 21st of December, 1790, a committee was appointed to bring in a bill to establish health officers in the principal ports of the Union. This committee consisted of Messrs. Lawrence, of New York; Seney, of Maryland; Fitzsimmons, of Pennsylvania; Vining, of Delaware; and Goodhue, of Massachusetts.

This committee does not seem to have made any report, and the intention of the motion is, therefore, not known. Congress also, by special act, approved the act of the legislature of Maryland levying a duty on vessels to pay the expenses of its health officer.

During the summers of 1796 and 1797 the yellow fever again prevailed widely and increased the public alarm by the extension of its area and the fatality of its attacks.

On the opening of the Fifth Congress, at Philadelphia, November 23, 1797, the President, John Adams, commenced his speech to the Houses as follows: "I was for some time apprehensive that it would be necessary, on account of the contagious sickness which afflicted the city of Philadelphia, to convene the national legislature at some other place. This measure it was desirable to avoid, because it would occasion much public inconvenience and a considerable public expense, and add to the calamities of the inhabitants of this city, whose sufferings must have excited the sympathy of all their fellow-citizens; therefore, after taking measures to ascertain the state and decline of the sickness, I postponed my determination, having hopes, now happily realized, that, without hazard to the lives or health of the members, Congress might assemble at this place, where it was next by law to meet. I submit, however, to your consideration whether a power to postpone the meeting of Congress, without passing the time fixed by the Constitution, upon such occasions, would not be a useful amendment to the law of 1794."

In the address of the House in response to the speech of the President, which it was at that time customary to make, the subject is noticed as follows: "While our sympathy is excited by the recent sufferings of the citizens of Philadelphia, we participate in the satisfaction which you are pleased to express, that the duration of the late calamity was so limited as to render unnecessary the expense and inconvenience that would have been incident to the convention of Congress in another place, and we shall readily attend to every useful amendment to the law which contemplates the event of contagious sickness at the seat of government."

Congress does not seem, however, to have taken any action at this session.

During the summer of 1798 yellow fever again appeared, and this time it attained the proportions of a national scourge. It prevailed at Portsmouth, N. H.; Boston and Salem, Mass.; Westerly, R. I.; Hartford, Stonington, New London, and Norwalk, Conn.; New York; Bridgeton and Woodbury, N. J.; Philadelphia, Marcus Hook, and Chester, Pa.; Wilmington, Christina, Duck Creek, and New Castle, Del.; Baltimore, Md.; Norfolk, Petersburg, and City Point, Va.; Charleston, S. C.

At the opening of the third session of the 5th Congress, December 8, 1798, President Adams thus addressed the two Houses: "While with reverence and resignation we contemplate the dispensation of Divine Providence in the alarming and destructive pestilence with which several of our cities and towns have been visited, there is cause for gratitude and mutual congratulations that the malady has disappeared, and that we are again permitted to assemble in safety at the seat of government for the discharge of our important duties. But when we reflect that this fated disorder has within a few years made repeated ravages in some of our principal seaports, and with increased malignancy, and when we consider the magnitude of the evils arising from the interruption of public and private business, whereby the national interests are deeply affected, I think it my duty to invite the legislature of the Union to examine the expediency of establishing suitable regulations in aid of the health laws of the respective States; for, these being formed on the idea that contagious sickness may be communicated through the channels of commerce, there seems to be a necessity that Congress, who alone can regulate trade, should frame a system which, while it may tend to preserve the general health, may be compatible with the interests of commerce and the safety of the revenue."

Petitions were prepared to be laid before Congress, both in Philadelphia and New York, asking aid of the general government. The Philadelphia committee went so far as to propose non-intercourse with the West India ports during the dangerous months of the season. The New York committee objected to such stringent measures, and a modified memorial was adopted. The health officer of New York, Dr. Richard Bayley, urged the formation of quarantine establishments at a proper distance from seaport cities, where ships could be examined and, if necessary, thoroughly cleansed and disinfected.

The subject was again brought before Congress by Mr. Smith, of Maryland, who was now chairman of the Committee of Commerce, as appears from the following extract from the Annals of Congress:

"On Wednesday, January 23, 1799, Mr. Smith, of Maryland, from the Committee of Commerce, reported a bill respecting quarantine and health laws, which was read and committed.

"On Monday, January 28, 1799, on motion of Mr. Smith, of Maryland, the House went into a committee of the whole, on the bill respecting quarantine and health laws; Mr. Rutledge in the chair.

"The bill was read as follows:

"SECTION 1. *Be it enacted, &c.*, That the quarantine and other restraints which shall be required and established by the health laws of any State, or pursuant thereto, respecting any vessel arriving in, or bound to, any port or district thereof, whether from a foreign port or place, or from another district of the United States, shall be duly observed by the collectors, and all other officers of revenue of the United States, appointed and employed for the several collection districts of such States respectively, and by the masters and crews of the several revenue cutters, and by the military officers who shall command in any port or station upon the sea-coast; and all such officers of the United States shall be, and they hereby are, authorized and required faithfully to aid in the execution of such quarantine and health laws, according to their respective powers and precincts, and as they shall be directed from time to time by the Secretary of the Treasury. And the said Secretary shall be, and is hereby, authorized, when a conformity to such quarantine and health laws shall require it, and in respect to vessels which shall be subject thereto, to prolong the terms limited for the entry of the same, and the report or entry of their cargoes, and to vary or dispense with any other regulations applicable to such reports or entries: *Provided*, That nothing herein shall enable any State to collect a duty of tonnage or impost without the consent of the Congress of the United States; *And provided*, That no part of the cargo of any vessel shall, in any case, be taken out or unladen therefrom otherwise than as by law is allowed, or according to regulations hereinafter established.

"SEC. 2. *And be it further enacted*, That when, by the health laws of any State, or by the regulations which shall be made pursuant thereto, any vessel arriving within a collection district of such State shall be prohibited from coming to the port of entry or delivery by law established for such district, and it shall be required by such health laws that the cargo of such vessel shall, or may be, unladen at some other place within or near to such district, the collector authorized therein, after due report to him of the whole of such cargo, may grant his special warrant or permit for the unloading and discharge thereof, under the care of the surveyor, or of one or more inspectors, at some other place where such health laws shall permit, and upon the conditions and restrictions which shall be directed by the Secretary of the Treasury, or which such collector may, for the time, reasonably judge expedient for the security of the public revenue: *Provided*, That in every such case all of the articles of the cargo so to be unladen shall be deposited, at the risk of the parties concerned therein, in such public or other warehouses or inclosures as the collector shall designate, there to remain under the joint custody of such collector and of the owner or owners, or master or other person having charge of such vessel, until the same shall be entirely unladen or discharged, and until the goods, wares, or merchandise which shall be so deposited may be safely removed, without contravening such health laws; and when such removal may be allowed, the collector having charge of such goods, wares, or merchandise may grant permits to the respective owners or consignees, their factors or agents, to receive all goods, wares, or merchandise

which shall be entered and whereof the duties accruing shall be paid or secured according to law, upon the payment by them of a reasonable rate of storage, which shall be fixed by the Secretary of the Treasury for all public warehouses and inclosures.

"SEC. 3. *And be it further enacted*, That there shall be purchased or erected, under the orders and with the approbation of the United States, suitable warehouses, with wharves and inclosures, where goods and merchandise may be unladen and deposited, from any vessel which shall be subject to a quarantine, or other restraint, pursuant to the health laws of any State as aforesaid, at such convenient place or places therein as the safety of the public revenue and the observance of such health laws may require: *Provided*, That the sites of all such warehouses and wharves, with such other adjoining lands as may be necessary for the public uses hereby authorized, shall be ceded to the United States by the State wherein the same shall be.

"'SEC. 4. *And be it further enacted*, That when by prevalence of any contagious or epidemical disease in or near the place by law established as the port of entry for any collection district, it shall become dangerous or inconvenient for the collector and other officers of the revenue employed therein to continue the discharge of their respective offices at such port, the Secretary, or in his absence, the Comptroller of the Treasury of the United States, may direct and authorize the removal of the collector, and the other officers employed in his department, from such port to any other more convenient place within, or as near as may be to such collection district, where such collector and officers may exercise the same authorities, and shall be liable to the same duties, according to existing circumstances, as in such lawful port or district; and of such removal, public notice shall be given as soon as may be.'"

The following discussion ensued:

"Mr. Livingston, of New York, moved to strike out the proviso at at the close of the third section, as it might, in his opinion, be productive of delay in some cases, and of danger in others. Some of the State legislatures might not be in session before the evil intended to be guarded against returns upon us, and it might interfere with the jurisdiction of towns or cities, of which those sites form a part. He knew that there were some gentlemen in the House who think no money ought to be expended by the United States for any public works until cessions of the jurisdiction are made. This may be proper, with respect to forts and magazines with which State jurisdiction might interfere; but this being merely a civil jurisdiction, and so far from interfering with any State jurisdiction, is to co-operate with the State regulations, gentlemen may vote for striking out this clause, without parting with their favorite doctrine.

"Mr. Dayton, of New Jersey, trusted the motion would not prevail. It was negatived, there being only 23 votes in favor of it.

"Mr. Livingston, of New York, then moved to amend the bill by striking out the second line of the third section with the words "and with approbation," which was certainly surplusage. Agreed to.

"Mr. Waln, of Pennsylvania, said if it were proper to cede the land on which the warehouses are built, he did not think it would be to cede the sites of wharves to the United States. He did not think it right, for instance, to cede the jurisdiction of any wharves which might be built in the vicinity of this city to the United States. He, therefore, moved to strike out the words "and wharves."

"Mr. Sewall, of Massachusetts, hoped the gentleman from Pennsylvania would not insist upon this motion. No wharves would be erected where wharves now are; and if the United States are at the expense of erecting wharves, they ought to have the jurisdiction of their sites, as well as of the sites of warehouses.

"This motion was negatived, there being only 12 votes for it.

"The committee rose and reported the bill, when Mr. Harper renewed the motion for striking out the proviso in the third section, for the reasons he urged in support of the former motion, and because this cession would be of no use to the United States; and after some few observations upon it, the motion was carried, 40 to 31.

"On motion of Mr. Sewall, of Massachusetts, the following section was added, repealing a law of the first session of the Fourth Congress, respecting quarantine:

"'SEC. 5. *And be it further enacted*, That the act entitled 'An act relative to quarantine,' passed in the first session of the Fourth Congress of the United States shall be, and the same is hereby, repealed.'"

January 29, 1799, the bill was read a third time and passed.

In the Senate an additional section was added, as follows:

"SEC. . *And be it further enacted*, That, whenever, in the opinion of the Chief Justice, or, in case of his death or inability, of the senior associate justice of the United States, a contagious sickness shall render it hazardous to hold the next stated session of the said court at the seat of government, it shall be lawful for the Chief or such associate justice to issue his order to the marshal of the district within which the Supreme Court is by law to be holden, directing him to adjourn the said session of the said Court to such other place within the same, or an adjoining district as he may deem convenient; and the said marshal shall thereupon adj urn the said court by making publication thereof in one or more public papers printed at the place by law appointed for holding the same, from the time he shall receive such order, until the time by law prescribed for commencing the said session. And the district judges shall, respectively, under the same circumstances, have the same power, by the same means, to direct adjournment of the district and circuit courts within their several districts, to some convenient place within the same, respectively."

This amendment was concurred in by the House, and the bill, as amended, was passed.

It was approved February 25, 1799.

In 1799–1800 there was much alarm in Europe in regard to the spread of the plague, and stringent quarantine measures were adopted by the British Government. There was some apprehension that the pestilence would be imported into this country, and Congress was urged to consider the question. On Friday, February 28, 1800, Mr. Waln, of Pennsylvania, presented a memorial from the health office in Philadelphia, stating that in consequence of the plague having raged in Morocco, Great Britain had enacted very strict quarantine laws, but although the port of Philadelphia might be watched by all the vigilance in the power of the health office there was no general law to keep that most dreadful scourge of the human race from being introduced into some ports of the United States. They prayed the attention of Congress thereto. Referred to the Committee of Commerce.

Wednesday, March 19, 1800, a memorial of the select and common councils of the city of Philadelphia was presented to the House and read, praying that Congress may take such precautionary measures to prevent the introduction of the plague, which has for some time prevailed in the countries bordering on the Mediterranean, as to their wisdom shall seem meet. Referred to the Committee on Commerce and Manufactures.

Friday, April 25, 1800, the Speaker laid before the House a letter from the Secretary of the Treasury, accompanying an estimate for an appropriation of moneys for carrying into effect the act respecting quarantine and health laws, which were read and ordered to lie on the table. No other action was taken, nor was the subject alluded to for upwards of two years.

On Friday, January 8, 1802, Dr. Samuel L. Mitchell, of New York, now for the first time a member of the House of Representatives, offered the following resolution:

"*Resolved*, That a committee be appointed to inquire and report whether any, and what, alterations are necessary to be made in the 'act respecting quarantine and health laws.'"

It was ordered that Mr. Mitchell, of New York; Mr. Eustis, of Massachusetts; Mr. Leib, of Pennsylvania; Mr. Archer, of Maryland; Mr. Lowndes, of South Carolina, be appointed a committee pursuant to the said resolution.

Dr. Mitchell was an active participant in the medical controversies in regard to the origin of yellow fever in New York. He was a strong advocate of non-contagion, and believed that pestilential diseases were frequently engendered on board of filthy ships. He did not, therefore, believe in quarantines for detention simply, but only for purification of ships. He was also an ardent believer in the efficacy of alkalies as an antidote to septic poisons, and hence advocated alkalies, vigorously applied, instead of fumigation.

In a letter to Dr. Richard Bayley, the health officer of New York, dated July 1, 1801, he concludes a history of quarantines with the following statement of his views:

"Vessels retain the pestilential because (1) from their structure it is difficult to introduce a sufficiency of fresh air to waft away the infectious gas; (2) from the manner of their construction it is also exceedingly difficult to scrub and scour and cleanse them by lime and alkalies, as houses are purified; and (3) from the preposterous custom of pronouncing a vessel clean after she has been pumped out and fumigated with tar and brimstone; while, in fact, she is as foul *after* being smoked as she was *before*. The negligence of navigators and owners of vessels on these points renders it absolutely necessary for public authority to interfere. All that I think necessary in the business is that the never-failing method of *house-cleaning* should be applied to *ship-cleaning* in the way that you have adopted with such happy success. And if the time shall arrive when sea-vessels shall be kept as clean as genteel habitations on shore, their crews and passengers will suffer as little by infection and pestilence; and then the dream of importing diseases from foreign countries will be forgotten or insisted on no more as a reality. And that this is not a mere conjecture but a practical fact is confirmed by the experience of the Dutch navigators; for they, carrying with them to sea the habits of that precise and unequaled cleanliness which prevails on shore in the United Netherlands, are rarely or never troubled with the fevers, the plagues, and the infectious distempers which incessantly harass the nastier nations of the earth."

The special object which Dr. Mitchell had in view in offering the above resolution seems to have been to give publicity to his opinions in regard to the virtues of alkalies as an antidote to sepion (septic poisons). He says:

"The particular object aimed at is to cleanse ships and vessels by means of *alkaline salts and lyes*, and to explode the miserable and delusive practice of fumigation; in short, to apply the modes of *cleaning houses to the purification of ships*. This will reduce the quarantine of vessels *to the simple process of cleaning by alkalies*, and eventually remove from commerce most of the tedious and burdensome restraints under which it is now groaning. Science will have a glorious triumph, and the American Government will set a noble and liberal example to the whole civilized world."

No. 623

On Tuesday, March 9, 1802, the following petition was referred to that committee:

"A petition of sundry merchants residing in the city and State of New York, importers of cotton, hides, and other raw materials, for manufacture, was presented to the House and read, stating that the inconveniences and expense to which the petitioners are subjected by being obliged, under the quarantine laws of the said State, to unload and deposit for a limited time in every year, the said articles on Staten Island, and praying that they may be permitted to keep the same in the public storehouse of the United States erected on the island aforesaid, free from storage, during the period of such quarantine."

"*Ordered*, That the said petition be referred to the committee appointed on the 8th of January."

The committee made no report at that session.

At the following session it appears that on the 15th of February, 1803, the House referred to that committee the following resolution: "That provision ought to be made by law for the regulation of quarantine within the District of Columbia." Finally, on the 25th of February, 1803, William Mitchell submitted his report, which is remarkable for its intelligent recognition of the unhealthfulness of ships, and the better methods of purification. The report is as follows:

The term "quarantine" has been used, in the commercial world, to denote the detention of ship or vessel at a convenient place, some distance from port, for the space of forty days, for the purpose of freeing her from contagion and infection, supposed to have been transported in her from foreign places; latterly it means any shorter number of days. Under the persuasion that their own cities and habitations were exempt from such contagion and infection, and that these destructive agents were always introduced from remote places, less salubrious than their own, mankind have taken great pains to protect themselves from external attacks of the distempers which they believed to be prevalent among their neighbors or strangers. By the presumption that contagion was frequent in many foreign settlements, and was readily transported from country to country by commercial communications, have the nations of the earth been influenced in framing the rules and the means of restraint imposed upon their mutual intercourse. They have often looked upon each other as lazars or lepers, and treated visitors and passengers at certain seasons as such.

The importance of the subject, as well to the commerce and revenue of the United States as to the happiness and security of her citizens, has induced your committee to look into it carefully. They have endeavored to gather facts and to deduce therefrom correct conclusions; and, upon the most complete investigation which they have been able to give the subject, they are decidedly of the opinion that the ideas generally entertained concerning quarantines are very erroneous.

It is true that certain diseases which afflict mankind, such as small-pox, for example, may be transferred from one person to another; but of late doubts have been entertained in the minds of some of the best observers, of such as have had great opportunities of knowing and judging, whether the like contagiousness is true of yellow fever and the fever infecting ships.

Sickness of distant places and the danger arising from any intercourse with them is one of the trite themes of remark almost everywhere. At the same time few people can be brought to acknowledge the noxiousness of the soil and atmosphere of the place of their permanent residence. Therefore the inhabitants of the West India Islands are positive that they import yellow fever from Boston, New York, Philadelphia, and Baltimore; while the inhabitants of those cities, respectively, have been quite as decided in their conviction that the same distemper is brought to them from Cape François, Kingston, Havana, and Demerara. Both sides are equally positive, and both about equally wrong. During the 700 or 800 years since the days of the crusades these erroneous sentiments have been indulged in Christendom. Great embarrassments have been experienced from them; and at this day they seem to be increasing. It is an object worthy the attention of the national legislature, to correct within these States this growing evil.

It is apparent to your committee that most, if not all, the infectious diseases which at times afflict the crews of sea vessels arise *not* from the ports or countries they have visited but from causes which exist *within* the *vessel*. Human beings inhabiting such crowded situations engender and communicate diseases which increase in frequency and malignity by sloth and uncleanness. Now, a ship is a human habitation, and sometimes the crew is very numerous, and usually prone to grow unclean. Frequently this uncleanness accumulates to a disgusting degree and turns to poison. The poison stirs up pestilence. Arrivals from Europe have given recent and woful proofs of this.

But a ship is not merely a human dwelling; she is also a magazine or storehouse. Within her sides, as in a common receptacle, are collected many sorts of things prone to perish and corrupt.

Beef, fish, pork, hides, and other animal substances frequently taint the hold that contains them with their deleterious vapors. This tendency to putrefy is often increased by the scanty quantity and weak quality of the Liverpool salt with which they are put up. Their provision spoiling during the West India voyages, and rotting on shipboard (which is a well-known case in hot climates), render the berths and quarters of the men unhealthy, the crew sickens from the operations of such mischievous agents, and some of them are soon destroyed. The evil is increased when they are obliged to feed on such tainted or spoiled meat as a part of a daily ration. Not only animal substances, but onions, coffee, Indian corn, and various other vegetables, which are transported from country to country, contribute, by their occasional decay, to render unhealthy the bottoms in which they are carried. From these causes it is well known that provisions carried between our ports and the southern islands degenerate, and frequently the vessels conveying them are found in a very filthy and unclean condition. From the corruption of their cargoes and the uncleanness of the crews, ships may be filled with a venomous atmosphere, and the timbers, planks, bedding, &c., be charged or impregnated with the inbred mischief. Many ships belonging to the United States afford instructive examples of fevers caused on board by the exhalations from putrid provisions on their outward-bound voyages. A corrupting barrel of beef has done great injury within a vessel sailing from Great Britain to the United States.

It is a remarkable fact that ships and vessels, though so prone to become foul and pestilential, are seldom cleansed in so complete a manner as they ought to be. From the time that they are launched to the day of their condemnation few or none of them are perfectly purified. Year after year this foulness increases, insomuch that old ships and vessels are usually the most nasty and loathsome of human habitations.

Ships being thus, from their structure, tenants, and cargoes, peculiarly liable to accumulate poison, and being rarely or never cleared out, as they ought to be, carry that infectious matter engendered within them to all parts of the world; and by a curious and unhappy mistake the pestilence produced in one of these floating mansions has been almost always referred to the place from which she last came, though that place commonly has not had any kind of agency in the matter.

Hence, it will appear to every reflecting mind that the common mode of quarantine by detaining a foul ship at anchor will rather increase than remedy the evil intended to be guarded against. Bills of health are nugatory or deceitful; for if a clean ship sails from a sickly place a foul bill of health will not really indicate an unfavorable state of health on board, nor prove the crew to be affected with the distemper that prevails in the port she left; nor will a clean bill that the people in a pestilential vessel are in good health or that she is in a safe or fitting condition to be admitted to port. Consequently, bills of health are either useless or worse than nothing. With the Dutch, who are remarkable for clean ships, and who carry the system of purification on board their vessels to a greater extent than any other nation of Europe, quarantine is a mere form only. Pestilence can neither be bred nor continued on board the vessels of the Hollanders.

Instead of the rigorous rules of quarantine adopted in the United States, your committee are of opinion the mischiefs intended to be guarded against thereby might be more effectually prevented by less injurious means. It is remarkable how little pains are taken to accomplish the complete and healthy purification of ships. None of the regulations which have hitherto been made direct the method of performing it or insist upon it with sufficient energy. A ship cannot be deemed wholesome or fit for a voyage merely because the hold and windows have been opened after she is unloaded, her decks washed and scraped, and the bilge-water pumped out. Nor will the smoking her out with brimstone, tar, or nitrous and muriatic vapors render her a suitable habitation to preserve the health and lives of men. As well might it be pretended that infected rooms, beds, and clothes could be purified by merely letting in the air and setting fumigating mixtures into action; when all domestic experience teaches that soap, lye, and lime are the only sure and efficacious auxiliaries in all cases of difficulty and danger.

It is a lamentable fact that, under the present quarantine regulations, in most places so little regard is paid to cleaning a fœtid and infectious ship, provided she does not transgress the rules *of the port where she happens to be*, by proceeding beyond her prescribed limits. She may, nevertheless, weigh anchor and go, in her foul condition, to *any other port or city* without the least impediment. By this miserable practice is the poison of plague, pestilence, or yellow fever produced, continued, and multiplied, by natural and necessary process, on shipboard, and carried to all the places she visits; and while this dreadful custom prevails, there will not probably be an end of the rumors of imported contagion, and all the consequent terror and stagnation of business at home and of detention of ships and expense of quarantine abroad. The recent accounts of the severe quarantine of a hundred days and more imposed upon American vessels in some of the principal ports of Spain, must fill every friend of our country with regret. It amounts to an almost total prohibition of our trade with those cities, and is viewed by your committee as countenanced by false alarms and unfounded suggestions prevalent among our own citizens. In order to prevent these commercial restraints, in some degree, it is necessary to form our health laws upon more scientific principles, and to regulate our marine and naval intercourse upon maxims more accordant with the means to preserve domestic neatness and household purity on shore.

Considering the great influence of names over human thought and action, and the high importance of a correct nomenclature for legal and scientific purposes, it were to be wished that the term quaran-

tine should be erased from the statute-books of the Union and of each particular State. Instead of ordering a vessel *to perform a quarantine*, she ought *simply to be directed to be made clean.* Such foul and infectious vessels, with sickly crews, should be prevented from coming to our cities or proceeding on any voyage in that situation. Nor is the matter so difficult of execution as many have imagined. When a vessel arrives from any foreign port, let her come to at some convenient place. If any are sick on board, let them be landed and all uncleanness put away. If she has any spoiled and putrefied provisions or merchandise on board, let them also be taken out. Then cause her to be scoured and cleaned in every part with pure water, soap, sand, alkaline, lye, lime, and other sweetening and purifying substances; after which the admission of a plenty of clean and good air will complete the work. These are the methods we use with success to cleanse our habitations on the land. They are equally applicable to habitations on the water, and it is necessary to scour the latter as frequently and as thoroughly as the former. But as individuals who own and navigate vessels are too careless or forgetful to cause them to be frequently and efficaciously cleansed, there is a necessity for public authority to interfere. This interference should be exerted to purify every foul and pestilential vessel that enters a port, and not keep her idly and injuriously riding at anchor. Quarantines may thus be shortened from forty days to *forty hours. Indeed, they would be nothing more than a thorough ship-cleaning.*

When the civilized world shall, with one accord, enforce the regular and exact purification of ships, there will be nothing on board to turn to pestilential or any other fever-producing agent, and all the inquiry necessary, when a vessel arrives, will be whether she is clean or dirty. As the latter is almost always the fact, she should be cleansed by public authority, and never suffered to go to sea, no more than enter a port, in a foul internal condition. There would then be no vessels afloat carrying infection with them from place to place, and the tales about contagion from foreign ports would gradually die away and cease to agitate society, as they now do, to the great detriment of our trade, and disgrace of commerce, medicine, and police.

After taking this comprehensive view of the subject, it would have been pleasing to the committee to have proposed something more in detail for the treatment of vessels arriving at the port of Alexandria, conformably to these principles, but the advanced period of the session prevents their offering more at this time to the House. They content themselves, therefore, for the present, with calling attention to this important subject and presenting for adoption, as a temporary expedient, a bill for extending the quarantine laws of Virginia to the territory of Columbia.

ABSTRACTS FROM CONSULAR REPORTS.

AMOY, CHINA.—United States Consul W. E. Goldsborough reports that, for the three weeks ending October 23, dysentery and malarial fevers were the prevailing diseases in that town. This is a very usual occurrence during the summer months, and the spread of the diseases is anticipated. The sanitary condition of the city is not good, owing to the absence of drainage and want of cleanliness.

BORDEAUX, FRANCE.—United States Vice-Consul L. A. Price reports that, during the month of October, there were 455 deaths; 8 were from small-pox, 6 from typhoid fever, 31 from pneumonia, 81 from consumption, 14 from pulmonary catarrh, 7 from bronchitis, 11 from accidents, and 2 from suicide. Sanitary condition of city is good.

CALCUTTA, INDIA.—United States Vice-Consul-General A. B. Cobb reports that, of the 195 deaths that occurred during the week ending October 2, there were 46 from fever, 16 from bowel complaints, 36 from tetanus, 11 from phthisis, 9 from heart diseases, from spleen and liver diseases 12, and from paralysis 2.

For the week ending October 9 there were 210 deaths, of which 55 were from fever; bowel complaints, 23; tetanus, 33; phthisis, 7; heart disease, 5; liver and spleen diseases, 12; convulsions, 9; accidents, 7.

FOOCHOW, CHINA.—United States Consul J. A. Wingate reports that the sanitary condition of the native portion of the city is very bad; that of the foreign settlement good. The drainage of the city is very poor, and the streets and habitations are very filthy.

MARSEILLES, FRANCE.—United States Consul J. B. Gould reports that during the month of October there were 813 deaths, of which 43 were from small-pox, 52 from typhoid fever, and 3 from other contagious or infectious diseases.

NINGPO, CHINA.—United States Consul Edward C. Lord reports that, for the five weeks ending October 23, the prevailing diseases have been diarrhœa, dysentery, ague, common and typhoid fevers, cholera, diseases of the lungs, heart, kidneys, &c. Measles, whooping cough, scarlet fever, &c., were also more or less common. Fevers were the most numerous, some few cases of which were fatal.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 27, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.		Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung disease, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
										Enteric.	Malarial.	Scarlet.	Yellow.							
Me	Portland	34,000	3	8	12.3	1	3							1						
N. H	Concord	14,000	2	8	29.6	1	1					1		1						
Vt	Burlington	16,500	3	8	25.3	1			1					1						
Mass	Boston	375,000	65	164	22.8	29	7	8	23	7		1		16	3	2			42	7
	Cambridge	52,800	5	13	11.8	2		1	1					5					2	
	Edgartown	1,294																		
	New Bedford	27,286	1	7	13.4	2													1	
	Newburyport	13,800	3	10	37.1	3			1		1			1						1
	Marblehead	7,285	1	3	21.0				1					1						
	Nantucket	3,276		1	13.8															
	Plymouth	7,094		3	22.1	1			1											
	Fall River	49,000	7	19	20.2	2			1					3	1					
	Lowell	59,485	8	14	12.3				1					1	1			1	3	
	Lawrence	39,000	5	10	13.4									4		1				
	Pittsfield	12,800		3	12.5						1			1						
	Worcester	58,295	10	22	19.6	3	1			1	1	1				1				
	Lynn	38,284	5	12	15.3	1			1			1								1
	Brockton	13,608	2	6	22.5	2				1										
	Holyoke	22,000		3	7.1	1				1										
	Bridgewater	3,645	1	2	28.7					1										
	Milford	9,200	1	3	17.0	1														
	Chicopee	11,325	2	3	14.4									1						
	Fitchburg	12,405		6	24.8	2								2		1				
	Somerville	25,000	2	6	12.5	3			1					1					1	
	Springfield	33,000		6	9.5	1														
R. I	Providence	104,862	8	35	17.4	7	3	1	2	1	1			3					8	2
Conn	New Haven	63,000	8	24	19.6	8			2		1								3	
	New Britain	14,000	1	3	11.1	1	1							1						
	Waterbury	20,300	5	6	15.4									2						
N. Y	New York	1,206,507	248	638	27.6	98	42	11	66	7	11	28		107	3	6	3	3	195	32
	Brooklyn	566,689	98	257	23.7	37	23	4	47	1	2	6		40		1			88	10
	Yonkers	19,000	1	4	11.0	2														
	Poughkeepsie	20,200	1	4	10.4	2				1										
	Newburg	18,043	3	7	20.3							1								
	Utica	34,500	1	7	10.7															
	Rochester	90,000	11	38	22.0	2	1	1	4			1		3					7	
	Buffalo	155,159	15	38	12.7	6	1	1	4	1	1	1		2				1		1
	Watertown	10,666	1	3	14.7	1														
	Binghamton	17,326	5	16	48.4	3	1	1	2			5								1
	Cambridge	1,850																		
	Seneca Falls	6,000		1	8.7									1						
N. J	Hudson County	209,000	36	83	20.7	14	4	2	4			3		12	1	2			14	
	Newark	138,000	24	57	21.8	11	5	1	4	1	1			4					8	2
	Orange	13,206	2	5	20.1									1						
	Camden	41,714	4	9	11.3	1	1				1			2					2	
	Plainfield	8,126	1	5	32.6	2		1												
Pa	Philadelphia	846,980	103	343	21.0	57	3	1	13	11		14		24			25			
	Pittsburgh	156,649	30	75	24.6	11	1		4	3		9		8	1				18	3
	Erie	28,565	2	6	11.1	2			1											1
Del	Wilmington	44,000	5	18	22.1	5					1	1								
Md	Baltimore	393,796	54	151	20.0	23	8	3	9	6	2	6		11		1		3	37	5
District of Columbia		180,000	34	82	23.7	17	3	3	1		2			13		1		1	13	2
Va	Norfolk	26,200	7	15	30.3	2			3		2			1					5	
	Richmond	65,000	9	32	26.0	2				3	1			3		1		2	7	4
	Lynchburg	16,500	1	7	22.1	2								1		1				1
N. C	Wilmington	17,600		6	17.7	1			1					2						
S. C	Charleston	57,000	8	28	25.5	4		2		1				2						
Ga	Augusta	27,012	5	10	19.4	1		2			1									
	Atlanta	38,000	5	14	19.0	2	1	1												
	Savannah	33,248	8	26	41.0	5		2			1			1						2
	Rome	5,000		2	10.9						2									
	Brunswick	2,900																		
Fla	Jacksonville	10,000		4	20.7	1					2									
Ala	Mobile	40,000	2	19	24.7	6		1			1			3					1	1
	Selma	7,505		3	20.9	1		1												
Miss	Columbus	5,300	1	2	20.0	1														
	Natchez	7,000		2	14.7									1						
	Vicksburg	12,500		4	16.7	1				1										1
La	New Orleans	216,359	42	131	31.6	31	2	2	3	1	4	2		8						4
	Shreveport	8,033		2	13.0											1				
	Baton Rouge	7,187	3	5	36.3	1														
Tex	San Antonio	20,597	3	9	22.8	5		2						1						
	Austin	16,000		3	9.8	1		1			1									
	Galveston	17,064	3	12	27.9	2	1													1
Ark	Little Rock	22,000	5	6	14.2			1		1				3				1		
Tenn	Nashville	43,543	3	15	17.6	1	1	2		1				3					4	2
	Clarksville	7,250	1	2	14.4	1														1
	Memphis	34,000	14	25	38.4	6		1			2			2						3
	Shelbyville	1,819		1	27.2						1									1
Ohio	Cincinnati	280,000	28	98	18.3	15	4	3	6	8				13		4		1	25	3
	Cleveland	175,000		52	15.5	2	2	3	7	2		1		4	1					4
	Gallipolis	4,500		2	23.2							1				1				
	Dayton	39,000	1	5	6.9	2	1			1									2	
	Portsmouth	11,320	1	3	13.8	1														
Ind	Indianapolis	75,350	11	23	15.7	3		2		1		2		7						
	Richmond	13,000	1	4	16.5				1			1								
	Evansville	30,000	4	11	19.3	3				2	4									
Ill	Chicago	503,298	95	200	20.7	18	25	1	29	2	1	6		21	1	6		1	77	4
	Peoria	34,850	7	13	19.4	3	1		1	2				4				1		
	Aurora	12,059	2	4	17.3	1	1												1	
	Jacksonville	15,000		3	10.5	1														
	Elgin	8,770	3	6	35.6	1	1		1			2		1						
	Moline	8,000		1	6.5															1
Wis	Milwaukee	115,781	29	52	23.4	3	1	1	3			11		3					18	3

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING NOVEMBER 27, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Minn ....Saint Paul	41,800	5	10	12.5	.....	1	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Mich ....East Saginaw	19,065	1	5	13.7	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Flint	9,000	1	3	17.4	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa.....Keokuk	12,125	1	3	13.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Mo .....Saint Louis	351,000	38	121	18.0	33	2	2	4	3	5	.....	.....	9	1	.....	.....	.....	24	6
Nebr ....Omaha	31,000	6	9	15.5	1	.....	1	1	.....	1	1	.....	2	.....	.....	.....	.....	.....	.....
Kans ....Lawrence	8,500	2	3	18.0	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo ....Boulder	3,030	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	5	9	18.8	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	6	1
Cal .....San Francisco	233,700	15	89	19.9	18	.....	2	1	2	2	.....	.....	14	.....	1	2	.....	11	1
Sacramento	21,500	3	9	21.8	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	1	6	28.7	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Vallejo	7,000	.....	2	14.7	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Totals	8,311,385	1,197	3,386	21.0	540	153	73	262	77	57	106	.....	391	13	31	30	15	624	113

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING NOVEMBER 27, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ... Boston	370,000	5,000	159	5	22.4	52.2
R. I .....Providence	101,062	3,800	34	1	17.5	13.7
Del .....Wilmington	38,000	6,000	14	4	15.5	34.8
Md .....Baltimore	338,384	55,412	117	34	18.0	32.1
District of Columbia	120,000	60,000	41	41	18.0	36.0
Va.....Norfolk	14,900	11,300	6	9	22.4	43.3
Richmond	39,971	26,660	12	20	13.3	39.2
S. C.....Charleston	25,000	32,000	9	19	18.7	30.9
Ga.....Savannah	18,229	15,019	6	20	17.1	69.2
Augusta	16,182	10,830	4	6	12.9	28.1
Atlanta	22,000	16,000	7	7	16.6	25.9
Brunswick	1,500	1,400	.....	.....	.....	.....
Fla .....Jacksonville	6,000	4,000	4	.....	34.8	.....
Ala .....Mobile	28,000	12,000	11	8	18.5	34.8
Selma	3,425	4,080	1	2	15.2	25.6
Miss.....Columbus	2,760	2,540	1	1	19.5	20.3
Natchez	3,500	3,500	2	.....	29.8	.....
La.....New Orleans	159,128	57,231	84	47	27.5	42.8
Shreveport	3,916	4,117	1	1	13.3	12.8
Baton Rouge	2,934	4,233	.....	5	.....	61.6
Tex.....Austin	12,000	4,000	2	1	8.7	13.0
Galveston	17,064	5,244	6	6	18.1	59.7
Tenn ....Nashville	27,874	15,669	9	6	16.5	19.8
Clarksville	4,000	3,250	.....	2	.....	32.1
Memphis	17,293	16,707	14	11	42.2	34.4
Ohio.....Portsmouth	10,320	1,000	3	.....	15.1	.....
Iowa ....Keokuk	11,165	960	2	1	9.3	54.4
Kans ....Lawrence	6,800	1,700	3	.....	23.0	.....
Totals	1,421,427	383,661	552	257	20.3	34.9

The following reports, for the week ending November 27, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 9; under 5 years, 2; consumption 2, diphtheria 1, lung disease 1. Allegheny, Pa., 78,000; deaths, 16; under 5 years, 8; consumption 1, croup 1, diphtheria 1, enteric fever 1, scarlet fever 3, lung disease 1, measles 2. Brattleboro', Vt., 6,000; deaths, 4; consumption 1, enteric fever 1. Bucyrus, Ohio, 3,950; death 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 2; under 5 years, 1; lung disease 1. Corinth, Miss., 2,264; deaths, 3; puerperal 1. Crystal Springs, Miss., 955; death, 1; under 5 years, 1. Dallas, Tex., 10,365; deaths, 2; lung disease 2. Decatur, Miss., 1,000; no deaths. Dixon, Cal., 1,200; death, 1; pneumonia 1. Helena, Mont., 3,630; deaths, 3; under 5 years, 2; diphtheria 2, whooping cough 2. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., 1,200; death, 1; consumption 1. Indianola, Tex., 900; death, 1, consumption 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,351; deaths, 3; under 5 years, 2; croup 1, puerperal 1. Kenosha, Wis., 5,500; deaths, 2; under 5 years, 1. Lebanon, Pa., 9,000; deaths, 2; accident 1. Louisiana, Mo., 5,200; death, 1; under 5 years, 1; measles 1. Madison, Ind., 9,009; deaths, 2; consumption 1. Martinsburg, W. Va., 5,800; deaths, 3; consumption 1, lung disease 1. Meridian, Miss., 4,013; deaths, 2. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; no deaths. Monmouth, Ill., 6,000; deaths, 2; under 5 years, 1; croup 1; lung disease 1. Montgomery, Ala., 17,000; deaths, 7; under 5 years, 1; croup 2, diphtheria 1, enteric fever 2, puerperal 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 3; consumption 1. Muscatine, Iowa, 8,412; deaths, 2; under 5 years, 2; scarlet fever 1, accident 1. Niles, Mich., 4,100; no deaths. Okalona, Miss., 2,000; no deaths. Painesville, Ohio, 5,604; no deaths. Pearlington, Miss., 1,200; death, 1; consumption 1. Phœnixville, Pa., 6,692; deaths, 2; under 5 years, 2; diphtheria 2. Pleasant Hill, Miss., 253; death, 1. Plymouth, Mich., 3,000; death, 1. Rock Island, Ill., 12,000; deaths, 6; under 5 years, 4; croup 1, diphtheria 1, scarlet fever 2, lung disease 1. Santa Cruz, Cal., 5,000; no deaths. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 5; under 5 years, 2. Summit, Miss., 1,808; deaths, 2; under 5 years, 2; diphtheria 2. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; death, 1. Winchester, Va., 5,000; no deaths. Winona, Minn., 10,000; deaths, 7; under 5 years, 7. Youngstown, Ohio, 15,089; deaths, 2; under 5 years, 1; accident 1. Total population, 314,995: deaths under 5 years, 31; total number of deaths, 99; annual rate per 1,000, 16.4.

DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

Under date of December 2 the Hon. W. Hunter, Second Assistant Secretary of State, informs the National Board of Health that the Government of the Argentine Republic, by a decree of the 11th of October last, designated Señor Don Julio Carrie (its chargé d'affaires *ad interim* in Washington) as its representative at the International Sanitary Conference.

Dr. Harry O. Perley, assistant surgeon, U. S. A., under date of November 23, reports that a case of measles occurred on the 21st instant at the post of Fort Assiniboine, Montana Territory. The patient, a young Gros Ventre squaw, contracted the disease from a passing band of Northern Cree Indians. She is now at the Indian interpreter's house, and all communication with the house has been stopped. He states that every precaution has been taken to prevent the spread of the disease.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island.	Victoria	5,000	Nov. 13	1	10.4													49.0
Canada	Kingston	15,000	Nov. 20	8	26.1													27.8
Do	Montreal	135,000	Nov. 6	69	26.7								3				4	41.8
Do	....do	135,000	Nov. 13	45	17.4								2				2	36.9
Bermuda	Hamilton	14,867	Nov. 16	5	17.5													74.5
Do	....do	14,867	Nov. 23	2	7.0													76.0
Cuba	Havana	195,437	Nov. 13	122	32.6				4		7		2					80.0
St. Christopher	Bassatene	10,000	Sept. 6	3	15.7													86.0
Do	....do	10,000	Sept. 13	7	36.5													84.0
Do	....do	10,000	Sept. 20	4	20.8													88.0
Do	....do	10,000	Sept. 27	8	41.7													88.0
British Honduras	Belize	4,000	Oct. 16	4	52.2													81.0
Do	....do	4,000	Oct. 23	4	52.2													82.7
Do	....do	4,000	Oct. 30	5	65.2													80.4
Do	....do	4,000	Nov. 6	1	13.0													87.0
Do	....do	4,000	Nov. 13	3	39.1													83.3
Aspinwall	Colon	2,500	Nov. 13	3	62.7													86.0
Mexico	Matamoras	16,000	Nov. 13	17	55.4					200	8							
Do	Vera Cruz	20,000	Nov. 7	19	50.3				10									81.9
Do	....do	20,000	Nov. 13	50	132.4				26									82.0
Teneriffe	Santa Cruz	16,610	Oct. 30	9	28.3													
St. Helena	Jamestown	6,241	Oct. 16	3	25.1							1	1					72.6
Do	....do	6,241	Oct. 23	1	8.4													74.2
Do	....do	6,241	Oct. 30	2	16.6													75.1
Ireland	Queenstown	10,000	Nov. 13	9	47.0													
Scotland	Dundee	155,100	Nov. 8	63	21.2							1				16	1	39.1
England	Tunstall	27,775	Nov. 13	7	13.1													48.2
Do	Leeds		Nov. 13	132	21.6												7	
Do	Bristol and Clifton	213,500	Nov. 6	126	30.7												6	40.0
Do	London	3,664,169	Nov. 6	1,513	21.6						7		21		1		95	
Do	Bradford		Oct. 30	73	19.3												7	
France	Lyons	342,815	Oct. 30	129	19.6						3		7				3	
Do	....do	342,815	Nov. 6	153	23.3		2						5				2	
Do	Rouen	104,209	Nov. 13	49	24.4													
Switzerland	Geneva	52,077	Oct. 2	14	14.0													
Do	....do	52,077	Oct. 9	14	14.0													
Do	....do	52,077	Oct. 16	11	11.0													
Do	....do	52,077	Oct. 23	16	16.0													
Do	....do	52,077	Oct. 30	10	10.0													
Do	Zurich	22,103	Nov. 6	9	21.2								1				4	42.0
Holland	Amsterdam	316,952	Nov. 6	132	21.7								2				3	
Germany	Brunswick	74,138	Nov. 6	39	27.4												2	
Do	Frankfort	130,000	Nov. 6	53	21.3							51	20			122	87	
Do	Berlin	1,096,844	Oct. 30	541	25.7													
Do	Mannheim	50,500	Nov. 6	13	13.4												6	
Do	Hamburg	400,000	Oct. 23	175	22.8								1				9	
Do	Breslau	276,000	Oct. 30	119	22.4												4	44.0
Saxony	Chemnitz	100,541	Oct. 30	60	34.1										1		4	
Do	Leipsic	150,836	Nov. 6	64	22.1							2	2			14	14	
Do	Dresden	220,500	Oct. 30	84	19.8							7	2			17	6	
Belgium	Brussels	406,638	Oct. 30	177	22.6								2				3	
Do	....do	406,638	Nov. 6	197	25.2								1				5	
Bavaria	Nuremberg	100,000	Oct. 30	37	19.3							36	2			3		
Denmark	Copenhagen	235,254	Nov. 2	116	25.8						6		7				6	
Hungary	Buda-Pesth	344,604	Oct. 30	195	29.5								9				9	
Roumania	Bucharest	177,646	Oct. 2	80	23.5						2		9				8	
Do	....do	177,646	Oct. 9	97	28.5						1		1		1		4	
Do	....do	177,646	Oct. 16	75	22.0						1		1		1		6	
Do	....do	177,646	Oct. 23	91	26.7						2		1		1		6	
Do	....do	177,646	Oct. 30	88	25.8								12					
Portugal	Lisbon	225,152	Oct. 16	148	34.2								2					
Do	Oporto	108,346	Oct. 16	74	35.6					4								71.5
Morocco	Tangier	15,000	Oct. 16	30	104.4					4	1	1						71.3
Do	....do	15,000	Oct. 23	30	104.4					4	1							69.2
Do	....do	15,000	Oct. 30	26	90.4					2								71.5
Do	....do	15,000	Oct. 2	29	100.8					5	1							70.0
Do	....do	15,000	Oct. 9	32	111.3													82.2
Barbary	Tripoli	20,000	Oct. 23	7	18.3													82.3
Do	....do	20,000	Oct. 30	14	36.7													83.0
Do	....do	20,000	Nov. 6	10	26.1													74.0
Cape Colony	Cape Town	35,000	Oct. 25	22	32.8													
Egypt	Alexandria	220,000	Nov. 6	217	51.5													
India	Bombay	644,405	Aug. 17	358	29.0						3						171	80.1
Do	....do	644,405	Aug. 24	400	32.4												161	80.8
Do	....do	644,405	Aug. 31	403	32.6												188	81.3
Do	....do	644,405	Sept. 7	403	32.6						1		1				169	80.6
Do	....do	644,405	Sept. 14	442	35.8												165	79.8

NATIONAL BOARD OF HEALTH BULLETIN.

ITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

ries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
.....	Kingston	15,000	Nov. 27	17	55.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.8
.....	Montreal	135,000	Nov. 20	53	20.5	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	7	28.5
.....	....do	135,000	Nov. 27	62	23.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	12.9
.....	Aux Cayes	9,000	Nov. 6	4	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.0
.....	....do	9,000	Nov. 13	6	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.0
.....	Port au Prince	30,000	Nov. 10	21	36.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91.0
.....	....do	30,000	Nov. 17	22	37.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.0
.....	Cape Haytien	7,500	Oct. 23	8	55.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	....do	7,500	Oct. 30	7	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	....do	7,500	Nov. 6	7	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	....do	7,500	Nov. 13	9	62.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	....do	7,500	Nov. 20	7	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	San Domingo	8,000	Oct. 17	4	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86.0
.....	....do	8,000	Oct. 24	5	32.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.0
.....	....do	8,000	Oct. 31	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87.0
.....	....do	8,000	Nov. 7	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.0
.....	....do	8,000	Nov. 14	6	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.0
.....	Turks and Caicos Islds.	3,500	Oct. 23	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82.0
.....	....do	3,500	Oct. 30	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.0
.....	....do	3,500	Nov. 6	3	44.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85.0
.....	....do	3,500	Nov. 13	3	44.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83.0
.....	....do	3,500	Nov. 20	3	44.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83.0
.....	Colon	2,500	Nov. 20	8	167.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83.0
.....	Vera Cruz	20,000	Nov. 21	42	111.0	.....	.....	.....	17	.....	.....	.....	.....	.....	.....	.....	.....	81.0
.....	Acapulco	3,500	Oct. 16	6	89.5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	84.0
.....	....do	3,500	Oct. 23	5	74.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.0
.....	....do	3,500	Oct. 30	7	104.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82.0
.....	....do	3,500	Nov. 6	6	89.5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	82.0
.....	Rio de Janeiro	330,000	Oct. 23	135	24.5	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	3	.....
.....	....do	330,000	Oct. 30	134	24.3	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	7	.....
.....	....do	330,000	Nov. 6	134	24.3	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	3	.....
.....	....do	330,000	Nov. 13	146	23.1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	6	.....
.....	Santa Cruz	16,610	Oct. 23	7	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.1
.....	Belfast	230,000	Nov. 13	94	26.8	.....	.....	.....	.....	.....	.....	28	4	.....	.....	.....	2	46.9
.....	Dublin	314,666	Nov. 13	239	39.5	.....	.....	.....	.....	.....	1	.....	5	.....	2	.....	16	47.2
.....	Queenstown	10,000	Nov. 20	7	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	Leith	58,479	Nov. 13	25	22.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	46.6
.....	....do	58,479	Nov. 20	26	24.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	45.7
.....	Dundee	155,100	Nov. 13	36	19.9	.....	.....	.....	.....	.....	.....	1	.....	1	1	30	1	44.1
.....	Liverpool	544,056	Nov. 13	264	25.3	.....	.....	.....	.....	.....	.....	6	5	32	2	46	27	47.6
.....	....do	544,056	Nov. 20	221	25.9	.....	.....	.....	.....	.....	.....	1	1	15	3	58	19	47.3
.....	Cardiff	82,364	Nov. 13	31	19.5	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	5	45.8
.....	Havre	92,068	Nov. 6	64	36.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.5
.....	....do	92,068	Nov. 13	69	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44.9
.....	Paris	1,988,806	Nov. 16	556	25.9	.....	.....	.....	.....	.....	15	.....	36	.....	.....	.....	69	.....
.....	Rotterdam	150,878	Nov. 13	73	25.3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	50	.....	.....
.....	....do	150,878	Nov. 20	73	26.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	63	1	.....
.....	Barmen	95,000	Nov. 6	37	29.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
.....	Bremen	109,000	Oct. 30	37	17.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	Cologne	141,639	Nov. 6	79	29.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	37.4
.....	....do	141,639	Nov. 13	70	25.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	Mannheim	50,500	Nov. 14	12	12.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	37.4
.....	....do	50,500	Nov. 20	16	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	47.1
.....	Berlin	1,096,644	Nov. 6	361	25.4	.....	.....	.....	.....	.....	.....	24	15	.....	.....	140	84	37.1
.....	Barmen	95,000	Nov. 13	36	19.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	41.5
.....	Brunswick	74,000	Nov. 13	37	26.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
.....	Bremen	169,000	Nov. 6	46	14.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
.....	Antwerp	174,643	Nov. 6	46	13.7	.....	.....	.....	.....	5	4	44	1	.....	.....	2	1	.....
.....	....do	174,643	Nov. 13	52	15.5	.....	.....	.....	.....	5	12	11	3	.....	.....	2	.....	.....
.....	Dresden	220,500	Nov. 6	66	15.6	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	2	2	36.0
.....	Leipsic	170,000	Nov. 13	65	19.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	41.0
.....	Copenhagen	235,254	Nov. 6	104	23.0	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	12	.....	38.6
.....	Rome	300,161	Sept. 19	174	30.2	.....	.....	.....	.....	.....	12	.....	9	.....	.....	.....	26	71.6
.....	....do	300,161	Sept. 26	176	30.6	.....	.....	.....	.....	.....	36	.....	7	.....	.....	.....	19	67.1
.....	....do	300,161	Oct. 3	176	30.6	.....	.....	.....	.....	.....	11	.....	8	.....	.....	.....	21	64.5
.....	....do	300,161	Oct. 10	176	30.6	.....	.....	.....	.....	.....	14	.....	5	.....	.....	.....	38	63.7
.....	....do	300,161	Oct. 17	176	30.6	.....	.....	.....	.....	.....	32	.....	5	.....	.....	.....	17	62.9
.....	Venice	140,000	Oct. 23	52	19.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	75.0
.....	....do	140,000	Oct. 30	52	19.3	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	4	68.0
.....	....do	140,000	Nov. 6	52	19.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	60.0
.....	....do	140,000	Nov. 13	52	19.3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	5	49.0
.....	....do	140,000	Nov. 20	52	19.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	45.0
.....	Vienna	146,243	Nov. 6	44	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	36.2
.....	....do	146,243	Nov. 13	39	13.9	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	11	39.1
.....	Buda-Pesth	237,846	Nov. 6	71	15.5	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	1	.....
.....	....do	237,846	Nov. 13	71	15.5	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....
.....	Warsaw	337,169	Oct. 30	97	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.6
.....	....do	337,169	Nov. 6	87	13.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.2
.....	Stockholm	120,429	Oct. 30	40	17.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	32.4
.....	Christiania	116,801	Oct. 23	43	19.1	.....	.....	.....	.....	.....	.....	38	1	.....	.....	6	5	35.1
.....	....do	116,801	Nov. 6	49	21.8	.....	.....	.....	.....	.....	.....	33	2	.....	.....	15	3	33.8
.....	Cadiz	65,028	Nov. 1	4	3.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68.1
.....	Lisbon	175,152	Oct. 23	142	42.2	.....	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	.....	64.9
.....	Oporto	106,346	Oct. 23	53	26.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	62.6
.....	Calcutta	433,393	Oct. 16	188	22.6	.....	6	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	82.7
.....	....do	433,393	Oct. 23	212	25.5	.....	6	.....	.....	.....	2	.....	2	.....	1	.....	.....	82.6
.....	....do	433,393	Oct. 30	179	21.5	.....	11	.....	.....	.....	1	.....	1	.....	.....	.....	.....	82.6
.....	....do	433,393	Oct. 31	179	21.5	.....	11	.....	.....	.....	1	.....	2	.....	.....	.....	3	82.9
.....	Shanghai	135,000	Oct. 16	39	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.4
.....	....do	135,000	Oct. 30	39	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.8
.....	Kobe	100,000	Oct. 23	25	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	....do	100,000	Oct. 30	25	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, DECEMBER 18, 1880. [No. 25.

DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

Under date of December 7, the Hon. William M. Evarts, Secretary of State, informs the National Board of Health that the minister of the United States at Caracas reports, in his dispatch of the 15th ultimo, that Señor Don Simon Comacho, chargé d'affaires of Venezuela in this country, has been authorized to assist at the conference in the character of delegate thereto, and that Señor Comacho is invested with suitable powers in the premises.

He also states that he is in receipt of a note dated the 4th instant, from Señor Comacho, informing him of his appointment.

Hon. John Hay, Assistant Secretary of State, under date of December 8, informs the National Board of Health that, according to a dispatch from Madrid, orders have been given to the governor-general of the island of Cuba to designate a person who, besides being a graduate in medicine and surgery, is also conversant with the sanitary condition of that island and of Porto Rico, to represent those islands, in conjunction with the Spanish minister in this country, at the proposed International Sanitary Conference.

He also states that the government of Italy accepts the invitation of the United States to be represented at the conference, trusting, however, that the date of assembling may be postponed. He states that a telegram will be sent to the minister of the United States at Rome to the effect that the date proposed cannot now be changed.

Also, under date of December 10, states that the Austro-Hungarian Government has named Count Edmund Bethlen as its delegate to the International Sanitary Conference of January next.

The Japanese minister, resident in this city, will represent the Japanese Empire in the International Sanitary Conference to be held on the 1st proximo.

ABSTRACTS FROM CONSULAR REPORTS.

AUCKLAND, NEW ZEALAND.—United States Consul G. W. Griffin forwards registrar general's report on vital statistics for principal towns of New Zealand for the month of September. The total number of deaths was 164, of which 90 were under 5 years of age. The deaths comprised 2 from diphtheria, 2 from croup, 3 from whooping-cough, 7 from phthisis, and 13 from lung diseases.

CALCUTTA, INDIA.—United States Consul A. B. Cobb reports that of the 239 total deaths during the week ending October 16, 24 were from cholera, 7 from typhoid fever, other fevers 67, bowel complaints 23, tetanus 25, phthisis 7, heart diseases 13, liver and spleen diseases 8. Annual death-rate per 1,000, 29.0.

For the week ending October 23 there were 279 deaths, of which 22 were from cholera, 9 from typhoid fever, other fevers 86, bowel complaints 30, tetanus 32, phthisis 5, heart diseases 13, liver and spleen diseases 18. Annual death-rate per 1,000, 33. 8.

CAPE OF GOOD HOPE, CAPE TOWN.—United States Consul W. W. Edgecomb, in his report for the week ending November 1, states that the summer season has now fairly set in, and the southeasterly winds, known as the "cape doctor," have commenced to blow furiously. The general health of the town and district is good, but the supply of water for drinking and household purposes is failing daily, and unless there is rain soon there will be a water famine in the town before the end of the year.

CONSTANTINOPLE, TURKEY.—United States Consul-General G. H. Heap, under date of November 15, forwards bulletins of epizootic diseases.

From these it appears that a disease which is reported the cattle plague has broken out in the vicinity of d'Ordon.

At Pergame and Tira, districts of Smyrna, sheep-rot is prevailing.

The disease among horses at Hedjaz has entirely disappeared, and also the carbuncle disease at Bursum and Carnabeili.

He also states that the sanitary condition of the empire is otherwise satisfactory, no epidemic being reported in any quarter.

HOBART TOWN, TASMANIA.—United States Consul A. G. Webste reports that during the month of August there were 46 deaths, of which 2 were from infectious diseases.

HONOLULU, SANDWICH ISLANDS.—United States Consul F. P. Hastings forwards mortuary report for month of October. The total number of deaths was 51; 30 males and 21 females. The principal causes of death were consumption 6, convulsions 4, debility 7, old age 7.

MALAGA, SPAIN.—United States Consul H. C. Marston, in forwarding his first reports, gives the following in regard to the sanitary condition of the city. In the old portion of Malaga the streets are exceedingly narrow, some of them not exceeding fifteen feet in width, and only on certain streets can a conveyance of any kind be driven. These narrow streets are paved with large bowlders and are kept tolerably free from dirt, but the drainage from the dwellings is very bad, and in almost every house the smell from the drain, together with the smell of a very inferior quality of oil used by the lower classes in cooking, is beyond description. The fact that Malaga escapes an epidemic can only be attributed to the excellence of the climate.

MONTEVIDEO, URUGUAY.—United States Consul A. L. Russell reports that during the month of September there were 261 deaths, of which 6 were from typhoid fever, heart diseases 26, diseases of brain and spine 27, diseases of liver 7, consumption 54, laryngitis 5, of digestive organs 16, genital organs 10, unknown 23; died without medical attendance 70.

He also states that there are no cases of contagious or infectious diseases known nearer than Flores Island, 18 miles from the city, where Her Brittanic Majesty's ship Garnet arrived from Brazil and was quarantined, several weeks ago, with 5 cases of yellow fever on board, but all now reported well.

NASSAU, N. P., BAHAMAS.—United States Consul Thomas J. McLain, jr., reports, under date of December 4, that there has been no yellow fever since October 1. The town is remarkably healthy, and its sanitary condition excellent.

SYDNEY, NEW SOUTH WALES.—During the month of September there were 240 deaths, being 77 above the 5 years' average. The principal causes of death were cephalitis 8, apoplexy 4, convulsions 12, heart disease 10, bronchitis 22, pneumonia 17, congestion of lungs 6, measles 40, whooping-cough 5, croup 4, typhoid fever 6, diarrhœa 5, dropsy 5, cancer 7, phthisis 16. Of the deaths from measels 35 were under 5 years of age.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

HAVANA, CUBA.—During the week ending December 3 there were 6 deaths from yellow fever and 8 deaths from small-pox. During the month of November there were 26 deaths from yellow fever, 16 of which were among civilians, and ten in the military hospitals. There were also 55 deaths from small-pox.

Dr. John T. Nagle, health officer of the city of New York, submits the following report for the third quarter of 1880:

SIR: Eight thousand four hundred and twenty-three deaths occurred in the city of New York during the three months ending September 30, 1880. This is an increase of 737 deaths when compared with the corresponding quarter of the year 1879, and a decrease of 209 when compared with the preceding three months, and represents an annual death rate of 27.92 to every 1,000 of the population, which

was 1,206,577 according to the United States census which was taken in June, 1880.

The mean meteorological observations for the quarter, according to the report of D. Draper, director of the New York Meteorological Observatory, Central Park, are as follows, viz: July, 74.90; August, 72.65; September, 67.10. The mean humidity (saturation being 100) for July was 72; August, 76; and September, 72. The number of miles traveled by the wind in July was 42.76; August, 44.42; and September, 46.55. The total depth of rainfall for July was 8.53 inches; August, 5.26; and September, 1.85 inches. This shows an increase of temperature during the third quarter of this year, compared with the corresponding quarter of 1879, of 1.43° Fahrenheit. The rainfall was 1.74 inches greater, and the number of miles traveled by the wind was 19.62 more, while the reading of the barometer was very slightly higher.

The deaths from the zymotic class of diseases showed a more perceptible fluctuation during the quarter than any of the other classes. In July there were 1,564 deaths from zymotic diseases, while the deaths from this class of diseases were but 751 in September; or, in other words, the mortality from zymotic diseases was 50.45 daily during the month of July, and but 25.03 in September. The mean temperature, Fahrenheit, however, was 7.80 degrees higher in July than September.

The mortality of this city is usually the highest during the third quarter of the year. This is verified by the accompanying table, by quarters, for the past nine years. The present year has been an exception to this rule, the second quarter having exceeded the third by upward of 200 deaths.

Quarters.	1871.	1872.	1873.	1874.	1875.
First	6,555	7,510	6,967	6,552	7,842
Second	6,597	8,824	6,605	6,542	7,064
Third	7,924	9,958	9,018	8,625	9,256
Fourth	5,900	6,355	6,494	7,008	6,547
Total	29,976	32,647	29,084	28,727	30,709

Quarters.	1876.	1877.	1878.	1879.	1880.
First	7,633	6,002	6,664	7,576	6,814
Second	6,704	6,047	6,334	6,606	8,632
Third	8,998	8,165	7,645	7,686	8,423
Fourth	5,817	5,989	6,365	6,474	.....
Total	29,152	26,203	27,008	28,342	.....

The most prominent causes of death during the third quarter of this year were diarrhœal diseases, which carried off 2,171 persons. Of this number but 279 were over 5 years of age. Phthisis pulmonalis caused the next highest number of deaths, 1,141; diseases of the brain and nervous system, 709; pneumonia, 369; Bright's disease and nephritis, 337; diphtheria, 311; marasmus and scrofula, 262; diseases of the heart, 241; bronchitis, 203. These nine causes produced 5,744 deaths, or 68.19 per cent. of the entire mortality.

Compared with the corresponding three months of 1879, the deaths from the following diseases showed an increase, viz: Diphtheria, 210; croup, 72; typhoid fever, 19; diarrhœal diseases, 86; phthisis pulmonalis, 175; bronchitis, 17; pneumonia, 60; diseases of the brain and nervous system, 45; Bright's disease and nephritis, 35; suicide, 14; drowning, 11. And the following a decrease, viz: Small-pox, 9; measles, 35; scarlatina, 105; whooping cough, 23; typhus fever, 2; puerperal diseases, 3; cancer, 3; diseases of the heart, 15; marasmus and scrofula, 8; and hydrocephalus and tubercular meningitis, 6. In comparison with the preceding three months of the present year there was an increase of 2 deaths from small-pox, 93 from diphtheria, 3 from whooping cough, 35 from typhoid fever, 822 from diarrhœal diseases, 31 from phthisis pulmonalis, 92 from marasmus and scrofula; and a decrease of 27 deaths from measles, 43 from scarlatina, 31 from membranous croup, 1 from typhus fever, 58 from puerperal diseases, 8 from alcoholism, 10 from cancer, 68 from bronchitis, 509 from pneumonia, 41 from diseases of the heart, 41 from marasmus and scrofula, 40 from Bright's disease, 19 from suicide, and 25 from drowning.

The number of deaths in tenement houses (houses which contain more than three families) during the quarter was 4,936; in institutions, 1,423; and in hotels and boarding-houses 58, against 4,246 deaths in tenement houses, 1,194 in institutions, and 64 in hotels and boarding-houses that occurred in the corresponding quarter of 1879.

The number of cases reported to the sanitary bureau during the three months ending September 30, of small-pox was 6; measles, 169; scarlatina, 379; diphtheria, 631; typhoid fever, 148; and cerebro-spinal fever, 42. There was, therefore, during the quarter 1 death to every 1.50 cases of small-pox reported, 1 death to every 4.57 cases of measles, 1 death to every 5.34 cases of scarlatina, 1 death to every 2.04 cases of diphtheria, 1 death to every 1.92 cases of typhoid fever, and 1 death to every 1.05 cases of cerebro-spinal fever.

Comparative table of mortality from the principal causes of death in the third quarter of the year 1880, with the corresponding quarter of the preceding five years.

Causes of death.	1880.	1875.	1876.	1877.	1878.	1879.	Total for 5 years preceding 1880.	Average for 5 years preceding 1880.
Total deaths from all causes	8,423	9,256	8,998	8,165	7,645	7,686	41,750	8,350.0
Total zymotic diseases	3,315	4,596	4,071	3,772	3,038	3,063	18,540	3,708.0
Total constitutional diseases	1,751	1,558	1,602	1,495	1,654	1,602	7,911	1,582.2
Total local diseases	2,563	2,359	2,526	2,199	2,232	2,306	11,622	2,324.4
Total developmental diseases	464	403	457	403	424	439	2,126	425.2
Deaths by violence	330	340	342	296	297	276	1,551	310.2
Small-pox	4	264	14	1	.....	13	292	58.4
Measles	37	53	34	48	23	72	230	46.0
Scarlatina	71	63	107	174	146	176	666	133.2
Diphtheria	311	489	228	194	152	101	1,164	232.8
Membranous croup	144	105	60	76	50	72	363	72.6
Whooping-cough	71	110	104	184	138	94	630	126.0
Typhus fever	.....	9	10	6	1	2	28	5.6
Typhoid fever	77	130	97	92	93	58	470	94.0
Puerperal diseases	75	64	77	62	60	78	341	68.2
Diarrhœal diseases of children under five years	1,892	2,771	2,830	2,433	1,923	1,882	11,839	2,367.8
Diarrhœal diseases of all ages	2,171	2,997	3,064	2,657	2,119	2,085	12,922	2,584.4
Alcoholism	46	40	34	27	34	59	194	38.8
Cancer	162	108	112	138	154	165	677	135.4
Phthisis pulmonalis	1,141	951	1,044	979	1,080	966	5,020	1,004.0
Bronchitis	203	170	203	148	175	186	882	176.4
Pneumonia	369	386	337	322	293	309	1,647	329.4
Heart diseases	241	212	236	177	219	256	1,100	220.0
Marasmus—tabes mesenterica and scrofula	262	257	213	221	228	270	1,189	237.8
Hydrocephalus and tubercular meningitis	135	159	160	118	134	141	712	142.4
Meningitis and encephalitis	147	228	231	172	203	162	996	199.2
Convulsions	180	198	213	219	194	158	982	196.4
Direct effect of solar heat	58	10	199	18	47	34	308	61.6
Apoplexy	100	81	81	81	95	121	459	91.8
All diseases of the brain and nervous system	709	685	904	673	729	664	3,655	731.0
Bright's disease and nephritis	337	259	264	272	269	302	1,366	273.2
Deaths by suicide	37	43	42	38	41	23	187	37.4
Deaths by drowning	66	81	83	79	86	55	384	76.8
Deaths in institutions	1,423	1,315	1,333	1,108	1,136	1,180	6,072	1,214.4
Deaths of persons seventy years old and over	435	397	395	361	387	413	1,953	390.6
Deaths of children under one year	2,952	3,784	3,637	3,264	2,773	2,893	16,351	3,270.2
Deaths of children under two years	3,833	4,918	4,735	4,246	3,591	3,644	21,134	4,226.8
Deaths of children under five years	4,401	5,623	5,283	4,828	4,145	4,164	24,043	4,808.6

Mortality from the principal causes of death, by months, for the third quarter of 1880 and 1879, with the mean meteorological observations.

[Population by United States census taken June, 1880, 1,206,577. Death rate per 1,000 inhabitants, 27.92.]

Meteorology and cause of death.	Year.	July.	August.	September.	Total for the third quarter.
METEOROLOGY.*					
Mean temperature (Fahr.)	1879	75.03	72.03	63.31	70.12
Do	1880	74.90	72.65	67.10	71.55
Mean reading of barometer	1879	29.885	29.829	29.996	29.903
Do	1880	29.876	29.958	29.925	29.9197
Mean humidity (saturation 100)	1879	65	71	79	71.667
Do	1880	72	76	72	73.33
Number of miles traveled by the wind	1879	4,096	3,812	3,503	11,411
Do	1880	4,276	4,442	4,655	13,373
Total rainfall (inches)	1879	3.58	7.95	2.37	13.90
Do	1880	8.53	5.26	1.85	15.64
CAUSES OF DEATH.					
Total deaths from all causes	1879	3,109	2,415	2,162	7,686
Do	1880	3,380	2,670	2,373	8,423
Total zymotic diseases	1879	1,422	966	675	3,063
Do	1880	1,564	1,000	751	3,315
Total constitutional diseases	1879	564	504	534	1,602
Do	1880	614	590	547	1,751
Total local diseases	1879	847	717	742	2,306
Do	1880	902	834	827	2,563
Total developmental diseases	1879	161	148	130	439
Do	1880	177	139	148	464
Deaths by violence	1879	115	80	81	276
Do	1880	123	107	100	330

* From the New York Meteorological Observatory, Central Park.

Mortality from the principal causes of deaths, &c.—Continued.

Meteorology and cause of death.	Year.	July.	August.	September.	Total for the third quarter.
CAUSES OF DEATH—Continued.					
Small-pox	1879	9	4	.....	13
Do	1880	3	.....	2	*4
Measles	1879	28	24	20	72
Do	1880	21	9	7	37
Scarlatina	1879	90	36	50	176
Do	1880	20	27	24	71
Diphtheria	1879	32	39	30	101
Do	1880	89	97	125	311
Membranous croup	1879	12	21	39	72
Do	1880	44	43	57	144
Whooping-cough	1879	32	25	37	94
Do	1880	25	23	23	71
Erysipelas	1879	9	9	4	22
Do	1880	8	5	3	16
Typhus fever	1879	.....	1	1	2
Do	1880	.....	.....	.....	.....
Typhoid fever	1879	10	30	18	58
Do	1880	23	22	32	77
Cerebro-spinal fever	1879	9	16	5	30
Do	1880	17	16	7	40
Puerperal diseases	1879	27	30	21	78
Do	1880	23	24	27	75
Remittent, intermittent, typho-malarial, congestive, and simple continued fevers	1879	39	41	57	137
Do	1880	39	54	57	150
Diarrhœal diseases of children under five years	1879	980	585	317	1,882
Do	1880	1,059	526	307	1,892
Diarrhœal diseases, all ages	1879	1,079	651	355	2,085
Do	1880	1,190	625	356	2,171
Inanition, want of breast milk, etc	1879	27	31	16	74
Do	1880	45	34	24	103
Alcoholism	1879	16	22	21	59
Do	1880	16	19	11	46
Rheumatism and gout	1879	18	10	9	37
Do	1880	17	10	3	30
Cancer	1879	57	57	50	165
Do	1880	61	49	52	162
Phthisis pulmonalis	1879	346	286	334	966
Do	1880	385	380	376	1,141
Bronchitis	1879	64	51	71	186
Do	1880	43	82	78	203
Pneumonia	1879	103	92	114	309
Do	1880	127	108	134	369
Heart diseases	1879	81	94	81	256
Do	1880	86	81	74	241
Aneurism	1879	4	2	7	13
Do	1880	4	5	5	14
Marasmus, tabes mesenterica, and scrofula	1879	83	97	90	270
Do	1880	94	99	69	262
Hydrocephalus and tubercula meningitis	1879	53	45	43	141
Do	1880	49	43	43	135
Meningitis and encephalitis	1879	72	48	42	162
Do	1880	54	54	39	147
Convulsions	1879	64	44	50	158
Do	1880	68	59	53	180
Direct effect of solar heat	1879	18	16	.....	34
Do	1880	39	10	9	58
Cirrhosis of liver and hepatitis	1879	22	19	20	61
Do	1880	28	25	30	83
All diseases of the brain and nervous system	1879	268	194	202	664
Do	1880	275	227	206	709
Apoplexy	1879	42	31	48	121
Do	1880	31	31	36	98
Enteritis, gastro-enteritis, peritonitis, and gastritis	1879	99	73	58	230
Do	1880	112	80	81	275
Bright's disease and nephritis	1879	125	85	92	302
Do	1880	114	117	106	337
Cyanosis and atelectasis	1879	14	21	19	54
Do	1880	19	14	13	46
Deaths by suicide	1879	8	8	7	23
Do	1880	18	9	10	37
Premature and preternatural births	1879	60	52	59	171
Do	1880	70	58	53	181
Deaths by drowning	1879	22	17	16	55
Do	1880	31	24	11	66
Surgical operations	1879	1	2	2	5
Do	1880	.....	.....	.....	.....
Deaths in institutions	1879	465	399	316	1,180
Do	1880	551	455	417	1,423
Deaths of persons seventy years old and over	1879	167	124	122	413
Do	1880	147	142	146	435
Deaths of children under one year of age	1879	1,343	891	659	2,893
Do	1880	1,428	864	660	2,952
Deaths of children under two years of age	1879	1,622	1,134	888	3,644
Do	1880	1,790	1,155	888	3,833
Deaths of children under five years of age	1879	1,809	1,307	1,048	4,164
Do	1880	1,980	1,347	1,074	4,401

*The first death reported from small-pox during the present quarter was that of a person who arrived from Antwerp in the steamship De Ruyter, and was sent from quarantine to Riverside Hospital. Two of the persons that died were never vaccinated, the history of one was not stated, and one whose age was 35 years was not vaccinated since infancy.

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MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
										Enteric.	Malarial.	Scarlet.	Yellow.							
	1880.																			
New Haven, Conn	October	63,500	19	53	9.8	3	5	.....	4	.....	3	.....	.....	4	.....	.....	.....	1	14	1
Stamford, Conn	July	12,000	8	18	18.0	3	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Do	August	12,000	2	10	10.0	5	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	September	12,000	3	13	13.0	1	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Providence, R. I	October	104,862	35	158	17.7	23	3	13	5	11	.....	8	.....	18	.....	.....	.....	.....	.....	7
Amsterdam, N. Y	do	9,360	4	12	15.4	.....	3	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	3	.....
Kingston, N. Y	November	19,000	6	14	8.8	3	1	.....	2	.....	3	.....	.....	2	.....	.....	.....	.....	.....	1
Troy, N. Y	August	57,000	43	113	22.6	35	4	21	6	.....	5	14	.....	4	.....	.....	1	1	.....	4
Do	September	57,000	37	99	20.3	19	8	7	11	.....	7	5	.....	4	.....	.....	18	.....	.....	.....
Hudson County, N. J	October	209,000	133	348	20.0	56	17	13	12	3	15	4	.....	42	.....	.....	.....	.....	74	.....
Elizabeth, N. J	November	28,000	.....	32	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paterson, N. J	October	50,950	47	100	23.5	13	11	2	5	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	5
Scranton, Pa	do	40,000	18	31	9.1	.....	.....	2	1	.....	.....	3	.....	1	1	.....	.....	.....	7	3
Norfolk, Va	do	26,200	25	69	31.0	8	.....	11	.....	1	11	.....	.....	3	.....	.....	.....	.....	27	1
Richmond, Va	do	65,000	78	158	29.0	34	.....	9	4	4	4	.....	.....	8	.....	.....	.....	10	.....	1
Lynchburg, Va	do	16,500	12	29	21.1	1	1	1	1	1	1	.....	.....	1	.....	1	.....	.....	.....	2
Mobile, Ala	do	40,000	26	71	21.9	6	1	7	.....	2	.....	.....	.....	6	.....	1	.....	1	11	.....
Nashville, Tenn	do	43,543	18	65	17.9	11	1	.....	.....	4	1	2	.....	3	.....	.....	.....	.....	.....	1
Shelby County, Tenn	July	.....	51	105	.....	10	.....	18	.....	.....	10	1	.....	6	2	2	.....	4	.....	10
Do	August	.....	22	79	.....	12	.....	13	.....	.....	14	.....	.....	3	1	1	.....	3	.....	5
Do	September	.....	22	91	.....	12	.....	14	.....	7	15	1	.....	2	3	3	.....	1	.....	5
Do	October	.....	28	96	.....	13	.....	10	.....	.....	15	.....	.....	3	.....	.....	.....	.....	.....	8
Toledo, Ohio	August	50,000	42	75	18.0	9	.....	16	.....	3	2	.....	.....	4	.....	.....	.....	1	22	13
Do	September	50,000	37	79	19.0	6	3	13	.....	2	6	.....	.....	4	.....	.....	.....	.....	.....	5
Lansing, Mich	October	8,326	1	5	7.1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Chicago, Ill	do	503,298	369	766	18.2	80	73	43	92	31	8	24	.....	60	1	.....	3	3	308	33
Galesburg, Ill	September	12,000	.....	4	4.0	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wis	October	115,761	58	196	20.3	19	10	13	19	1	5	12	.....	13	2	.....	.....	1	67	6
Watertown, Wis	do	10,000	6	16	19.2	2	.....	.....	9	.....	.....	.....	.....	1	1	.....	.....	.....	10	.....
Saint Paul, Minn	September	41,800	33	67	19.2	4	.....	9	4	10	1	.....	.....	3	1	.....	.....	.....	.....	1
Keokuk, Iowa	October	12,125	4	10	9.9	2	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Oakland, Cal	do	35,000	15	36	12.3	3	.....	6	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	6

NOTES.

NEW HAVEN, CONN.—Mean temperature for October, 52°; mean humidity, 73.8; prevailing winds, northwest; rain fell on 8 days; rainfall, 4.07 inches.

PROVIDENCE, R. I.—Still-born, 11; 5 of American and 6 of foreign parentage. Only 3 deaths among the colored population in October. Of the 153 decedents 67 were of American and 86 of foreign parentage. Dr. Snow repeats his opinion as to the causation of diphtheria and enteric fever, ascribing them to impure air or polluted water, or both, and thinks that scarlet fever is at least greatly aided in its propagation by the same physical conditions.

SCRANTON, PA.—For October, 9 marriages; 7 of foreign and 11 of native birth. Births reported, 45, all white; 33 males, 12 females.

NORFOLK, VA.—The deaths for October were 33 white, annual rate 26.1 per 1,000; 36 colored, annual rate 37.5 per 1,000. Still-born, 6; 1 white, 5 colored. Mean temperature, 60°.6; maximum, 82°; minimum, 39°. Mean humidity, 68.1 Rainfall, 3.08 inches; prevailing winds, northeast.

RICHMOND, VA.—Deaths in October, 68 white, annual rate 21.4; 90 colored, annual rate 40.3 per 1,000. Still-born, 4 white; 8 colored. Mean temperature, 63°.6; rainfall, 2.14 inches.

LYNCHBURG, VA.—Deaths in October, 11 white; 18 colored; population as to color not given. Still-births, 6.

MOBILE, ALA.—Deaths in October, 32 white, annual rate 17.2; 39 colored, annual rate 38.3 per 1,000.

NASHVILLE, TENN.—Deaths in October, 35 white, annual rate 15.0; 30 colored, annual rate 23.0 per 1,000. Mean temperature, 59°.9; lowest, 47°.5; highest, 72°.5. Rain on 11 days; rainfall, 7.24 inches.

SHELBY COUNTY, TENN.—Population not given. Deaths in July, 47 white; 58 colored. For August, 37 white; 42 colored. For September, 43 white; 48 colored. For October, 41 white; 55 colored.

CHICAGO, ILL.—Deaths in October, 761 white; 5 colored. Of foreign birth, 163. Premature births, 15; still-births, 48. Mean temperature, 51°.3; highest, 78°; lowest, 28°. Prevailing winds, southwest. Rain on 10 days; rainfall, 3.09 inches.

MILWAUKEE, WIS.—In October there were 2 premature and 14 still-births. Mean temperature, 48°.4; highest daily mean, 67°; lowest, 33°.5; prevailing winds, southwest; rain on 8 days; rainfall, 0.51 inches.

SAINT PAUL, MINN.—Highest temperature in September, 90°; lowest, 36°; prevailing winds, northwest; rain on 5 days; rainfall, 1.74 inches. Mean temperature for the month, 58°.9.

KEOKUK, IOWA.—Mean temperature for October, 52°.5; highest, 79°; lowest, 18°; prevailing winds, southwest. Rain fell on 2 days; rainfall, 2.02 inches.

OAKLAND, CAL.—Of 5,426 pupils in the public schools 218, or 4 per cent., were reported sick during the month of October.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 4, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	34,000	5	15	23.0	3	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	2	9	33.3	3	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,000	1	3	9.5	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	57	164	22.8	31	5	9	22	4	.....	2	.....	22	9	1	.....	.....	39	5
Cambridge	52,800	10	26	25.6	1	.....	1	.....	1	.....	.....	.....	8	2	.....	.....	.....	3	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	26,875	6	16	32.4	1	.....	1	1	.....	.....	.....	.....	1	.....	1	.....	.....	4	.....
Newburyport	13,800	.....	6	22.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	1	3	21.0	1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,726	.....	3	41.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	3	5	36.8	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowell	59,485	6	17	14.9	4	1	1	1	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....
Lawrence	39,000	1	11	14.7	4	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Pittsfield	12,300	.....	2	8.3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Worcester	58,295	11	21	18.8	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	5	.....	.....
Lynn	38,284	6	8	10.9	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brockton	13,608	1	5	18.7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bridgewater	3,015	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,200	2	5	28.3	.....	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Chicopee	11,325	.....	1	4.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	1	3	13.0	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Somerville	25,000	5	11	23.0	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Springfield	33,000	4	18	28.5	4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	3	3
R. I ..... Providence	104,862	15	31	25.4	4	3	.....	1	1	.....	1	.....	6	.....	.....	.....	1	7	2
Conn .... New Haven	63,000	9	30	24.5	2	1	.....	6	.....	1	.....	.....	2	.....	.....	.....	.....	9	2
New Britain	14,000	2	6	22.2	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	1	1
Waterbury	20,300	1	2	5.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,206,507	312	681	28.9	114	34	18	66	6	12	38	.....	121	3	8	.....	5	199	24
Brooklyn	566,689	93	251	23.2	31	15	2	45	.....	6	13	.....	45	.....	4	.....	.....	84	9
Yonkers	19,000	3	4	11.0	.....	.....	.....	1	.....	.....	.....	.....	4	.....	.....	.....	.....	1	.....
Poughkeepsie	20,200	2	5	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburg	18,043	1	3	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Utica	34,500	4	8	12.3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rochester	90,000	8	35	20.3	3	1	1	1	2	.....	1	.....	6	.....	.....	.....	.....	6	1
Buffalo	155,159	16	52	17.4	7	1	.....	5	1	1	1	.....	4	.....	.....	.....	.....	9	4
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	2	2	17.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Dunkirk	8,000	.....	3	19.6	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	30	88	22.0	13	4	1	4	1	2	.....	.....	16	.....	3	.....	.....	13	14
Newark	138,000	24	66	25.2	11	6	1	2	1	.....	2	.....	8	.....	1	.....	.....	8	1
Orange	13,206	2	5	20.1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Camden	41,714	9	18	22.5	2	.....	.....	1	1	.....	.....	.....	4	.....	.....	3	.....	6	.....
Pa ..... Philadelphia	846,980	123	404	24.9	61	12	3	9	30	.....	7	.....	30	.....	.....	32	4	.....	.....
Pittsburgh	156,649	13	48	13.7	4	....	.....	3	.....	.....	6	.....	12	.....	.....	.....	.....	10	6
Erie	28,346	2	4	7.4	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Del ..... Wilmington	44,000	4	9	11.0	.....	2	.....	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....
Md ..... Baltimore	393,796	52	158	21.0	27	.....	3	6	4	3	8	.....	14	.....	1	.....	3	.....	.....
District of Columbia	180,000	21	67	19.4	10	6	2	3	4	2	.....	.....	12	.....	.....	.....	.....	19	3
Va ..... Norfolk	26,200	10	20	40.4	.....	.....	.....	2	1	.....	.....	.....	2	.....	.....	.....	.....	6	1
Lynchburg	16,500	2	4	12.6	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	9	20	18.2	1	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	.....	14	27.1	1	1	.....	.....	.....	3	.....	.....	4	.....	.....	.....	.....	.....	.....
Atlanta	38,000	1	10	13.5	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
Savannah	33,248	13	29	45.7	4	.....	2	.....	.....	1	.....	.....	5	.....	.....	.....	.....	.....	.....
Rome	5,600	.....	3	31.3	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick	2,900	.....	2	36.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	3	4	20.9	.....	.....	1	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	5	17	22.1	4	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....
Selma	7,505	.....	3	20.9	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss .... Natchez	7,000	.....	1	7.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	3	11	45.9	2	1	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	23	98	23.6	22	.....	.....	.....	2	6	2	.....	11	.....	1	.....	.....	.....	.....
Shreveport	8,033	2	6	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Morgan City	2,018	.....	4	103.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Tex ..... San Antonio	20,597	1	4	10.1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Waco	8,000	.....	3	19.6	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Galveston	22,308	6	16	37.2	2	.....	.....	1	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	2	5	11.9	1	.....	.....	.....	1	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	5	16	18.9	3	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	1	3	.....
Clarksville	7,250	1	4	28.9	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,850	.....	2	27.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Memphis	34,000	3	15	23.0	2	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Shelbyville	1,919	.....	1	27.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Ky ..... Louisville	175,000	10	41	12.2	9	4	.....	.....	3	.....	.....	.....	2	.....	.....	.....	.....	8	2
Ohio .... Cincinnati	280,000	29	111	20.7	16	.....	2	4	4	.....	5	.....	25	.....	3	.....	.....	.....	.....
Cleveland	175,000	.....	65	21.2	5	5	1	6	1	.....	2	.....	11	.....	.....	.....	1	.....	3
Dayton	39,000	.....	7	9.4	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
Gallipolis	4,500	1	3	34.8	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Portsmouth	12,225	.....	1	4.6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	11	24	16.4	3	2	2	1	.....	.....	1	.....	6	.....	.....	.....	.....	7	.....
Richmond	13,000	4	6	24.7	1	1	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Evansville	30,000	4	8	13.9	2	1	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,053	62	156	16.2	14	.....	.....	19	3	3	1	.....	29	.....	1	.....	1	.....	.....
Peoria	34,850	4	9	13.5	.....	.....	2	1	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....
Aurora	12,059	.....	3	13.0	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Jacksonville	15,000	2	3	10.5	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	3	6	35.6	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	115,781	36	67	30.0	5	4	.....	4	1	.....	9	.....	5	1	1	.....	.....	25	.....
Minn .... Saint Paul	41,800	2	8	10.0	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Mich .... East Saginaw	19,065	2	3	8.2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansing	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa ..... Keokuk	12,125	1	3	13.0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Nebr .... Omaha	31,000	3	13	22.4	1	3	.....	3	.....	.....	1	.....	1	.....	2	.....	1	.....	.....
Kans .... Lawrence	8,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 4, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Utah ....Salt Lake City	25,000	3	12	26.0	2	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	2	.....
Colo .....Boulder	3,030	.....	1	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cal .....San Francisco	233,700	26	98	21.9	18	1	4	.....	6	2	1	.....	19	2	2	2	.....	18	1
Sacramento	21,500	2	6	14.6	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	.....	4	19.2	1	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	5	36.8	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Totals	7,836,737	1,165	3,307	21.8	494	123	71	230	85	52	110	.....	483	17	30	37	24	496	92

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING DECEMBER 4, 1880.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass ....Boston	370,000	5,000	161	3	22.7	31.3
R. I .....Providence	101,062	3,800	29	2	15.0	27.5
Del .....Wilmington	38,000	6,000	4	5	4.4	43.5
Md .....Baltimore	338,384	55,412	136	22	24.9	20.7
District of Columbia	120,000	60,000	39	28	16.9	24.3
Va.....Norfolk	14,900	11,300	7	13	26.5	60.0
Richmond	25,000	32,000	.....	.....	.....	.....
S. C .....Charleston	25,000	32,000	6	14	12.5	22.8
Ga .....Augusta	16,182	10,830	6	8	19.4	37.5
Atlanta	22,000	16,000	7	3	16.6	9.8
Savannah	18,229	15,019	11	18	15.0	33.2
Brunswick	1,500	1,400	1	1	34.8	37.3
Fla .....Jacksonville	6,000	4,000	3	1	26.1	13.0
Ala .....Mobile	28,000	12,000	9	8	16.8	34.8
Selma	3,425	4,080	.....	3	.....	38.4
Miss .....Natchez	3,500	3,500	.....	1	.....	14.9
La .....New Orleans	159,128	57,231	71	27	23.2	24.6
Shreveport	3,916	4,117	3	3	40.0	38.4
Tex ..... Waco	5,000	3,000	3	.....	31.3	.....
Galveston	17,064	5,244	15	1	45.5	9.9
Tenn ....Nashville	27,874	15,669	7	9	12.8	29.7
Clarksville	4,000	3,250	1	3	13.0	48.2
Murfreesboro	2,000	1,800	1	1	26.1	29.0
Memphis	17,293	16,707	10	5	30.2	15.6
Ky .....Louisville	153,125	21,875	28	13	9.5	31.9
Ohio.....Portsmouth	11,225	1,000	1	.....	5.0	.....
Kans ....Lawrence	6,800	1,700	.....	.....	.....	.....
Totals	1,538,607	403,934	559	192	18.9	24.8

The following reports, for the week ending December 4, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 3; under 5 years, 1. Allegheny, Pa., 78,000; deaths, 16; under 5 years, 8; consumption 1, diphtheria 1, scarlet fever 5, measles 1. Belfast, Me., 5,308; deaths, 2; consumption 1. Brattleboro', Vt., 6,000; deaths, 2; under 5 years, 1. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 6,400; death, 1; lung disease 1. Chillicothe, Ohio, 11,000; deaths, 4; consumption 2. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; deaths, 2; under 5 years, 2. Crystal Springs, Miss., 955; death, 1; under 5 years, 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Helena, Mont., 3,630; death, 1; under 5 years, 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,351; death, 1; lung disease 1. Kenosha, Wis., 5,500; deaths, 3; consumption 2, diphtheria 1. Lebanon, Pa., 9,000; deaths, 4; consumption 1, lung disease 1. Louisiana, Mo., 5,200; no deaths. Madison, Ind., 9,009; deaths, 4; under 5 years, 1; croup 1, pneumonia 1, puerperal 1. Milan, Tenn., 1,800; death, 1; lung disease 1. Milledgeville, Ga., 3,000; death, 1; under 5 years, 1. Monmouth, Ill., 6,000; deaths, 2; under 5 years, 1. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,412; deaths, 2; under 5 years, 1; scarlet fever 2. Muskegon, Mich., 11,300; deaths, 5; under 5 years, 3; diphtheria 1, enteric fever 2, malarial fever 1. Niles, Mich., 4,100; deaths, 2; bronchitis 2. Painesville, Ohio, 5,504; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; no deaths. Pleasant Hill, Miss., 253; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; deaths, 2; lung disease 1. Ripley, Miss., 1,000; death, 1; enteric fever 1. Santa Cruz, Cal., 6,000; death, 1; accident 1. Starkville, Miss., 1,454; death, 1. Steubenville, Ohio, 13,500; deaths, 3; under 5 years, 2. Summit, Miss., 1,808; death, 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 2. Tuscaloosa, Ala., 2,000; deaths, 2; croup 1. Winchester, Va., 5,000; deaths, 3; under 5 years, 3; croup 2, lung disease 1. Winona, Minn., 10,000; no deaths. Youngstown, Ohio, 15,089; deaths, 7; under 5 years, 2; consumption 2; lung disease 1, accident 1. Total population, 282,293; deaths under 5 years, 29; total number of deaths, 81; annual rate per 1,000, 15.0.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.				Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Hartford Hospital	Hartford, Conn	General	150	104	2	1	3	5	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	3	7	1	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41	49	9	87
Albany Hospital	Albany, N. Y	do	125	48	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	55	42	..	55
Emigrant Hospital	New York, N. Y	do	475	286	3	3	1	5	..	..	..	..	7	9	1	2	..	..	..	1	5	..	1	4	27	31	..	9	7	3	3	4	9	5	4	3	3	9	..	8	..	..	..	..	1	1	..	..	227	110	17	286
Hart's Island Hospital	Hart's Island, N. Y	do	300	217	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	46	23	4	236
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	5	3	..	6
Rochester City Hospital	Rochester, N. Y	do	125	73	2	2	..	4	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	3	..	..	..	..	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	30	34	2	67
Saint Barnabas Hospital	Newark, N. J	do	40	21	4	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	3	1	22
Saint Michael's Hospital	do	do	140	146	7	8	5	7	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	12	11	..	13	..	..	..	..	2	3	..	2	..	..	..	..	..	..	..	..	..	78	57	11	156
Memorial Hospital	Orange, N. J	do	13	14	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	6	9	1	9
Germantown Hospital	Germantown, Pa	do	25	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	7	..	19
Jewish Hospital	Philadelphia, Pa	do	40	16	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	11	1	16
Homeopathic Hospital	Pittsburg, Pa	do	40	23	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	1	1	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	22	21	2	22
Freedmen's Hospital	Washington, D. C	do	300	237	4	..	6	..	..	..	..	..	2	..	1	..	..	..	..	..	1	..	..	..	6	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	9	..	..	..	..	..	78	45	13	260
Providence Hospital	do	do	160	105	7	4	2	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	16	..	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	78	74	4	108
Freedmen's Hospital	Augusta, Ga	do	50	15	..	..	..	1	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	3	4	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	5	1	17
Georgia Infirmary	Savannah, Ga	do	50	31	..	..	1	..	..	..	..	..	2	1	..	1	..	..	..	..	..	..	..	..	2	3	..	6	..	..	..	..	2	..	1	1	..	..	..	..	..	..	..	..	..	..	14	12	3	30
Saint Luke's Hospital	Detroit, Mich	do	25	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	12
Saint Louis Hospital	Saint Louis, Mo	do	250	73	..	..	..	7	..	..	..	..	7	11	..	..	..	..	..	..	..	..	..	..	17	21	..	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	57	2	59
German Hospital	San Francisco, Cal	do	150	72	3	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	4	7	6	..	3	..	..	..	..	1	..	..	1	2	..	..	2	..	..	..	..	..	..	59	48	3	80
Naval Hospital	Brooklyn, N. Y	do	115	46	2	..	1	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	6	2	1	8	..	..	..	..	..	..	..	..	..	..	8	4	1	43
Do	Washington, D. C	do	50	16	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	5	7	1	13
Do	Mare Island, Cal	do	77	28	2	1	..	5	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	6
Riverside Hospital	New York, N. Y	Contagious diseases	150	17	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	2	6	1	5	2	2	..	..	5	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	17	6	4	12	30	18	5	20
State Hospital for Women and Child'n	Philadelphia, Pa	Women and children	18	7	..	..	..	..	2	1	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	3	1	19
Women's Hospital of Illinois	Chicago, Ill	Women	20	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	7	..	16
State Hospital for Insane	Worcester, Mass	Insane	650	527	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	9	3	532
Retreat for Insane	Hartford, Conn	do	150	143	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	8	1	138
Hospital for Insane	Middletown, Conn	do	530	526	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	16	3	529
New York City Lunatic Asylum	Blackwell's Isl'd, N. Y	do	1256	1298	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38	37	1	1291
Marshall Infirmary	Troy, N. Y	do	200	150	2	..	..	5	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	60	49	9	144
Willard Asylum	Willard, N. Y	do	1594	1657	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	6	7	1666
New York State Asylum	Auburn, N. Y	do	150	144	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	....	143
State Hospital for Insane	Danville, Pa	do	700	389	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	11	1	387
West Pennsylvania Hospital for Insane	Dixmont, Pa	do	500	597	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	6	9	593
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	364	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	21	1	367
Eastern Lunatic Asylum	Williamsburg, Va	do	329	581	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	1	1	333
State Lunatic Asylum	Austin, Tex	do	359	373	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	7	7	5	368
Minnesota Hospital for Insane	Saint Peter, Minn	do	868	656	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	19	79	27	568
Insane Asylum of California	Stockton, Cal	do	1111	1110	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	2	5	1111

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Vancouver's Island	Victoria	5,000	Nov. 27	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
Canada	Kingston	15,000	Dec. 4	16	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24.5
Bermuda	Hamilton	14,867	Nov. 30	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.5
Do	...do	14,867	Dec. 7	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuba	Havana	195,437	Nov. 27	150	40.1	.....	.....	.....	9	.....	18	.....	.....	.....	.....	.....	.....	79
Mexico	Matamoras	16,000	Nov. 20	32	104.4	.....	.....	.....	.....	300	15	.....	.....	.....	.....	.....	17	.....
Do	...do	16,000	Nov. 27	20	65.2	.....	.....	.....	.....	300	14	.....	.....	.....	.....	.....	6	.....
St. Helena	Jamestown	.....	Nov. 6	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.1
Ireland	Londonderry	30,834	Nov. 13	1	1.7	.....	.....	.....	.....	.....	.....	.....	.....	28	1	.....	.....	.....
Do	Queenstown	10,000	Nov. 27	6	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Nov. 20	107	30.6	.....	.....	.....	.....	.....	.....	29	1	.....	.....	.....	.....	40
Do	...do	230,000	Nov. 27	127	35.1	.....	.....	.....	.....	.....	.....	25	3	.....	.....	7	4	43.7
Do	Dublin	314,666	Nov. 20	201	33.2	.....	.....	.....	.....	.....	1	.....	5	.....	4	.....	16	35.9
Do	...do	314,666	Nov. 27	228	37.7	.....	.....	.....	.....	.....	2	.....	10	.....	7	.....	22	43.5
Scotland	Leith	58,479	Nov. 27	30	26.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	39.3
Do	Dundee	155,100	Nov. 20	59	19.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	1	31.9
England	London	3,664,149	Nov. 13	1,636	23.3	.....	.....	.....	.....	.....	17	.....	19	.....	.....	.....	164	46.3
Do	...do	3,664,149	Nov. 20	1,489	21.2	.....	.....	.....	.....	.....	10	.....	16	.....	.....	.....	139	.....
Do	Bristol and Clifton	213,500	Nov. 13	84	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	47.1
Do	...do	213,500	Nov. 20	121	29.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	.....
Do	Bradford	197,196	Nov. 6	82	21.7	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	7	.....
Do	...do	197,196	Nov. 13	76	20.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	.....
Do	...do	197,196	Nov. 20	74	19.6	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3	.....
Do	Liverpool	544,056	Nov. 27	299	28.7	.....	.....	.....	.....	.....	1	3	4	26	7	36	27	42
Do	Tunstall	27,775	Nov. 20	10	18.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	40.1
Wales	Cardiff	82,364	Nov. 20	29	18.3	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3	44.3
France	Paris	1,988,806	Nov. 18	988	25.9	.....	.....	.....	.....	.....	15	.....	36	.....	.....	.....	69	.....
Do	...do	1,988,806	Nov. 25	933	24.4	.....	.....	.....	.....	.....	18	.....	30	.....	.....	.....	72	.....
Do	Rouen	104,209	Nov. 20	34	16.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Lyons	342,815	Nov. 13	153	23.4	.....	.....	.....	.....	.....	7	.....	8	.....	.....	.....	7	.....
Holland	Amsterdam	316,992	Nov. 13	165	27.2	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....	10	49
Do	Rotterdam	150,378	Nov. 27	71	24.6	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	75	3	.....
Germany	Berlin	1,096,644	Nov. 13	539	25.6	.....	.....	.....	.....	.....	.....	40	9	2	.....	129	81	42.1
Do	Breslau	276,000	Nov. 6	135	25.5	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	19	34.9
Do	...do	276,000	Nov. 13	115	21.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	39.2
Do	Brunswick	74,000	Nov. 20	27	19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Do	Barmen	95,000	Nov. 20	39	21.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	38.1
Do	Bremen	109,000	Nov. 13	27	12.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Cologne	141,639	Nov. 20	65	23.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	13	.....
Do	Frankfort	130,000	Nov. 13	33	13.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	39.3
Do	...do	130,000	Nov. 20	36	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	52.0
Do	Mannheim	50,500	Nov. 27	12	12.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.6
Do	Hamburg	400,000	Oct. 30	176	22.9	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	6	.....
Bavaria	Nuremburg	100,000	Nov. 6	49	25.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	36.7
Saxony	Leipsic	150,836	Nov. 20	66	22.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	43.7
Do	Dresden	220,500	Nov. 13	100	23.6	.....	.....	.....	.....	.....	.....	2	2	.....	.....	17	17	43.9
Do	Chemnitz	101,115	Nov. 6	58	30.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	34
Do	...do	101,115	Nov. 13	47	27.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
Belgium	Brussels	406,638	Nov. 13	179	23.5	.....	.....	.....	.....	.....	.....	21	7	.....	.....	17	4	45
Italy	Rome	304,192	Oct. 30	190	32.5	.....	.....	.....	.....	.....	25	.....	6	.....	.....	.....	13	61.7
Do	Genoa	185,000	Nov. 27	84	23.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.8
Austria	Vienna	746,243	Nov. 20	308	18.4	.....	.....	.....	.....	.....	15	.....	1	.....	.....	.....	17	47.3
Hungary	Buda-Pesth	344,604	Nov. 6	210	31.8	.....	.....	.....	.....	.....	6	.....	4	.....	.....	.....	9	.....
Do	...do	344,604	Nov. 13	231	34.9	.....	.....	.....	.....	.....	11	.....	2	.....	.....	.....	6	.....
Roumania	Bucharest	177,648	Nov. 20	107	31.4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	9	.....
Russian Poland	Warsaw	357,169	Nov. 13	198	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
Sweden	Stockholm	169,429	Nov. 6	96	30.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	19	36.1
Norway	Christiania	116,801	Nov. 13	50	22.3	.....	.....	.....	.....	.....	.....	30	2	.....	.....	14	7	32.9
Portugal	Lisbon	225,152	Oct. 30	131	28.0	.....	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	.....	66.8
Do	Oporto	108,346	Oct. 30	74	35.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	66.7
Spain	Malaga	115,882	Nov. 13	83	37.4	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	67.4
Do	Cadiz	65,028	Nov. 6	31	24.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66.7
Do	...do	65,028	Nov. 20	54	43.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64.2
Do	Seville	138,000	Nov. 7	72	27.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	5	59
Do	...do	138,000	Nov. 14	83	31.4	.....	.....	.....	1	.....	.....	.....	.....	.....	4	.....	1	60.8
Barbary	Tripoli	20,000	Nov. 13	13	33.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Cape Colony	Cape Town	35,000	Nov. 1	22	32.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
India	Calcutta	429,535	Oct. 30	245	29.7	.....	16	.....	.....	.....	2	.....	10	.....	2	.....	.....	79.3
Do	Bombay	644,405	Sept. 21	399	30.2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	168	78.2
Do	...do	644,405	Sept. 28	416	31.7	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	154	79.7
Do	...do	644,405	Oct. 5	436	32.8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	81.3
Do	...do	644,405	Oct. 12	469	34.0	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	184	84.0

National Board of Health

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MONTHLY REVIEW FOR NOVEMBER, 1880.

Owing to the addition of a few cities and more regular reports from others, the population represented in the tables shows an increase of 227,799 since October, and the weekly average for November is 8,020,890. But with regard to this essential basis of statistics, it must be observed that there are still several large cities, especially in the Atlantic States, whose population is greatly over-estimated, according to the returns of the tenth census so far received. These errors, while important as to the individual cities, are reduced to a decimal quantity in the general mortality of eight millions of people, and as the tables here given refer only to this general mortality, the results are vitiated to no great extent by the errors referred to. It is, however, highly desirable that all cities should as early as possible correct their estimates of population to accord with the last census. The general death-rate has been very uniform since the subsidence of the summer diseases; in September, 20.41, in October, 20.24, and in November, 20.46 per 1,000. The ratio of mortality in the white and colored races remains nearly constant; the reports from about 30 cities, representing an average weekly population of 1,525,873 white, and 393,832 colored, give for the month of November a mean death-rate of 18.4 for the white and 30.8 for the colored people.

With the view of extending the statistics furnished by the weekly reports, a new form of postal card has been furnished by the National Board of Health, and it is hoped that all health officers and others supplied with these forms will fill them so far as may be possible.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Nov. 6.....	7,872,093	3,153	20.90	1,020	6.76	32.35	795	5.26	25.21	473	3.13	15.00	322	2.13	10.21	339	2.24	10.67	213	1.41	6.76
Nov. 13.....	8,020,483	3,037	19.76	1,086	7.06	35.76	798	5.19	26.27	467	3.04	15.37	331	2.15	10.90	338	2.20	11.08	217	1.41	7.14
Nov. 20.....	7,969,598	3,004	19.67	1,088	7.12	36.22	744	4.87	24.77	422	2.76	14.05	322	2.11	10.72	357	2.33	11.89	224	1.46	7.46
Nov. 27.....	8,221,385	3,386	21.49	1,207	7.66	35.64	931	5.90	27.50	540	3.42	15.95	391	2.48	11.55	415	2.63	12.26	262	1.66	7.74
Totals	32,083,559	12,580	.....	4,401	.....	.....	3,268	.....	.....	1,902	.....	.....	1,366	.....	.....	1,449	.....	.....	916	.....	.....
Means	8,020,890	3,145	20.46	1,100¼	7.16	34.98	817	5.31	25.98	475½	3.09	15.12	341½	2.22	10.86	362¼	2.36	11.52	229	1.49	7.28

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Nov. 6.....	126	0.83	3.91	65	0.43	2.06	93	0.62	2.95	82	0.54	2.60	1	0.01	0.03	20	0.13	0.63	68	0.45	2.16	24
Nov. 13.....	121	0.79	3.94	95	0.62	3.13	81	0.53	2.70	64	0.42	2.11	2	0.01	0.07	17	0.11	0.56	47	0.31	1.54	33
Nov. 20.....	133	0.87	4.43	96	0.63	3.19	71	0.46	2.36	68	0.44	2.26	4	0.03	0.13	15	0.10	0.50	44	0.29	1.46	28
Nov. 27.....	153	0.97	4.52	106	0.67	3.13	73	0.46	2.15	77	0.49	2.28	13	0.08	0.39	15	0.09	0.44	57	0.36	1.68	30
Totals	533	.....	.....	362	.....	.....	318	.....	.....	291	.....	.....	20	.....	.....	67	.....	.....	216	.....	.....	115
Means	133¼	0.87	4.24	90½	0.59	2.87	79½	0.52	2.53	72¾	0.47	2.31	5	0.03	0.16	16¾	0.11	0.53	54	0.35	1.71	28¾

Causes of death.—The change of season, which was already well established by the third week in November, raised the rate of acute lung diseases to 2.48 per 1,000 for the fourth week, and the mean for the month was 2.22, as compared with 1.54 for October, being an advance of 44 per cent. During the same time consumption increased only from 2.96 to 3.09, or 4.4 per cent; this difference is constantly observed on the occurrence of sudden changes of weather, and the reasons are obvious. Diarrhœal diseases have steadily declined from their enormous maximum of 13.6, July 19, and have now fallen to the rate of 0.52 per 1,000, being a reduction of nearly 60 per cent. since last month. The six other zymotic diseases exhibit the following changes: *Increased.* Diphtheria from 1.27 to 1.49, or 17 per cent.; scarlet fever from 0.41 to 0.59, or 44 per cent.; measles are more prevalent than last month, but still furnish only 20 deaths for the four weeks. *Decreased.* Enteric fever from 0.52 to 0.47, or 9 per cent.; whooping-cough from 0.16 to 0.11, or 31 per cent.; malarial fevers from 0.58 to 0.35, or 23 per cent. The total result in the six diseases shows an increase from 2.96 to 3.04, or about 4 per cent. The 94 deaths from small-pox were divided as follows: New York 4, Brooklyn 1, Camden, N. J., 4, Philadelphia 85; in addition to these, 21 are reported from San Francisco, making a total of 115. Yellow fever has continued at Key West, Fla., and three fatal cases were reported during the month, the last one occurring on the 24th.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,707,456	7,590	16.35	2,123	5.85	27.97	1,193	3.28	15.72	930	2.57	12.25	1,024	2.83	13.49	676	1.87	8.91
Southeast	1,515,814	2,454	21.11	620	5.33	25.26	423	3.64	17.23	197	1.69	8.03	127	1.09	5.17	70	0.60	2.85
Northwest	1,500,155	1,989	16.86	405	3.51	20.36	217	1.88	11.19	188	1.63	9.69	275	2.39	14.18	158	1.37	8.15

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES—Continued.

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	348	0.96	4.58	228	0.63	3.00	146	0.40	1.92	155	0.43	2.04	15	0.04	0.20	46	0.13	0.61	78	0.22	1.03	94
Southeast	57	0.49	2.32	53	0.45	2.16	104	0.99	4.24	58	0.50	2.36	.....	.....	.....	21	0.18	0.85	101	0.87	4.11	.....
Northwest	117	1.02	6.03	79	0.69	4.08	47	0.41	2.42	66	0.57	3.40	5	0.04	0.26	13	0.11	0.67	30	0.26	1.55	.....

Distribution of diseases.—Consumption remains nearly the same in the Northeast section, having changed only from 3.25 to 3.28, but in the Southeast it has advanced from 3.09 to 3.64, or 18 per cent.; and in the Northwest has fallen from 2.01 to 1.88, or 6 per cent. In the latter section, however, the most marked increase in acute lung diseases is noted, namely, from 0.94 to 1.63, or 73 per cent.; the increase in the Northeast was from 1.90 to 2.57, or 35 per cent., while in the Southeast the rate has risen from 1.06 to 1.69, or 59 per cent. Measles prevail to some extent in the two Northern sections, but do not appear as a cause of death this month in the Southeast. Diphtheria and croup have generally increased, except in the Southeast, where a decline of 18 per cent. in diphtheria and an increase of only 9 per cent. in croup are noted.

Of the 676 deaths from diphtheria in the Northeast section, 461 were in the State of New York, 211 in New York City, and 208 in Brooklyn, showing an excessive mortality in the latter city. In the New England States 121 deaths were reported, and 73 from Pennsylvania. In the Northwest section diphtheria seems more uniformly distributed among the larger cities; in the Southeast section 39 out of the 70 deaths, or 56 per cent., were in Baltimore and Washington, leaving only 31 south of the Potomac and Ohio Rivers. The same observation applies to scarlet fever, the two cities above named reporting 39 out of the 53 deaths in the Southeast section, showing that portion of the country to be generally remarkably free from these two most formidable of the contagious or infectious diseases. Malarial fevers are everywhere yielding to the change of season, and show a decline of 39 per cent. in the Northeast, 33 per cent. in the Southeast, and 61 per cent. in the Northwest, the highest death-rate being only 0.87, in the Southeast section. Whooping-cough shows some incesease in the Northwest, but is declining in the other sections, and the highest rate is but 0.18 per 1,000, in the Southeast. Enteric fever shows a general decline, in the Northeast, from 0.49 to 0.43, or 12 per cent.; in the Southeast, from 0.62 to 0.50, or 20 per cent.; and in the Northwest, from 0.64 to 0.57, or 11 per cent.

It will be observed that the mortality in the Southeast section from diphtheria, croup, scarlet fever, measles, and whooping-cough is generally influenced by the reports from Wilmington, Del., Baltimore, and Washington, but especially the first two cities, to a much greater degree than the proportion of their population to that of the whole section. This fact is kept in view in noting the distribution of the diseases mentioned, but those cities are included in the Southeast section chiefly on account of their large colored population, and with a view to future investigation of the diseases of that race.

ABSTRACTS FROM CONSULAR REPORTS.

LONDONDERRY, IRELAND.—United States Consul A. Livermore reports, for the week ending November 13, 25 cases and 5 deaths from typhoid fever. For the week ending November 27, 28 cases are reported, but the number of deaths is not stated.

MALTA AND GOZO.—United States Consul C. B. Eynaud reports, for the two weeks ending November 15, a total of 196 deaths, in a population of 154,830, exclusive of the troops; annual death-rate, 33 per 1,000; mean temperature, 70°. The only causes of death noted are 3 from typhoid fever and 1 from diphtheria.

SANTANDER, SPAIN.—The report from this province for the month of September gives a total of 457 deaths, in a population of 235,300; annual death-rate, 25.3. The births during the same period were 487; annual birth-rate, 27 per 1,000. Of the decedents, 175 were under 5 years, and 105 over 60 years of age. The principal causes of death were: Small-pox, 6; scarlet fever, 4; diphtheria and croup, 9; typhus fever, 9; dysentery, 19; puerperal fever, 5; consumption, 56; acute lung diseases, 47; brain diseases, 30; diarrhœal diseases, 76.

VALPARAISO, CHILI.—United States Consul L. H. Foote reports, for the month of September, 413 deaths, in a population of 101,088; annual death-rate, 49.7; small-pox, 5 deaths; fevers, 82; consumption, 75; other lung diseases, 82.

In october there were 384 deaths; annual death-rate, 46.2 per 1,000. Deaths from small-pox, 2; fevers, 87; consumption, 52; other lung diseases, 77. The epidemic of small-pox having disappeared, clean bills of health have been issued for some time.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BURLINGTON, VT.—Under date of December 10, Dr. Geoger M. Ockford reports that cases of diphtheria and scarlet fever still occur, the latter in a very mild form. Diarrhœa has been prevalent, and several cases of a low form of "nervous fever" have been observed. Catarrhal affections have increased, as usual at this season.

GAYLORD, KANS.—Dr. M. F. Leary, under date of December 10, writes that this town of 300 inhabitants is situated in Smith County, on the North Solomon River, and on the Central Branch Railroad, 209 miles west of the Missouri River, by rail. The spring of this year was very dry, and a few heavy rains in June were followed by another drought. In July intermittent fevers appeared, and in August typho-malarial fevers began and continued until the cold weather of December 1. In the town there were 7 cases and 3 deaths; in the county, having about 14,000 population, there were about 200 cases and over 40 deaths. The epidemic extended through all the northern part of the State, and about one-third of the cases were attended with hemorrhage from the mucous surfaces, especially from the bowels. During this time other diseases proved very intractable; it is said that typho-malarial fever has never before prevailed in this part of the country.

HAVANA, CUBA.—For the week ending November 26, there were 6 deaths from yellow fever and 18 from small-pox.

During the week ending December 10, there were only 3 deaths from yellow fever; 16 deaths from small-pox occurred in the same time.

SAINT MARY'S, GA.—Dr. F. A. Barnard, port physician, reports, for the three months ending December 3, more than usual sickness in the town, ascribed chiefly to the long-continued bad weather; only one death is noted (from typhoid fever, November 9). The English brig *Neva* arrived November 30, from Jamaica, having lost her captain, whose death was said to have been from heart disease. Two seamen were sick with fever, which proved to be malarial, yielding readily to quinine. The vessel was kept in quarantine until the recovery of these cases, and no others occurred. A few days later the French brig *Blanche* arrived from Guadaloupe with a foul bill of health, but no sickness on board; she was detained for proper cleansing and fumigation.

TAMPA, FLA.—The Surgeon-General of the United States Army forwards a letter from Assistant Surgeon J. Y. Porter, dated December 10, and reporting one fatal case of yellow fever at Key West, December 4. This is stated to be the first case reported since November 24.

DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

The following notes have been received by the National Board of Health from the Department of State:

December 14.—The German Government having signified a desire to send a representative to the conference, but requesting a delay of one or two months, the honorable Secretary of State replied that such delay was not admissible, in view of the number of acceptances already received for January 1, 1881.

December 16.—Mr. Yoshida, minister from Japan to the United States, informs the Department of State that his government will be duly represented at the conference, but does not give the name of the delegate.

December 17.—The Russian Government will be represented at the conference by its minister to the United States, Mr. Bartholomei.

A communication from the Department of State to the National Board of Health, dated December 21, states that the Japanese Government will be represented at the conference by its present minister to Washington, Mr. Jusbir Yoshida Kigouari. A note of the same date announces that the Roumanian Government will not be repre in the conference, but will be glad to profit by its results, applying them, so far as Roumania is concerned, in administration.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 11, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	34,000	2	10	15.3	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Bangor	16,780	2	6	18.7	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	.....	4	14.8	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	1	3	9.5	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Mass .... Boston	375,000	69	190	26.4	28	15	1	31	3	.....	3	.....	27	2	2	.....	1	.....	8
Cambridge	52,471	4	13	11.8	2	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	26,875	.....	10	19.1	2	.....	1	1	.....	.....	.....	.....	2	.....	1	.....	.....	5	.....
Newburyport	13,537	.....	1	3.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	3	5	34.9	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	2	14.7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lowell	59,485	12	27	23.7	6	1	1	2	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Lawrence	39,000	7	17	22.7	2	.....	1	2	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1
Worcester	58,295	10	31	27.7	2	.....	.....	1	2	.....	7	.....	3	.....	1	.....	.....	.....	.....
Lynn	38,284	3	13	17.7	3	.....	.....	1	1	.....	.....	.....	4	.....	.....	.....	.....	1	.....
Brockton	13,608	2	4	15.0	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Holyoke	23,000	4	8	18.0	.....	.....	.....	.....	2	.....	.....	.....	5	.....	.....	.....	1	.....	.....
Bridgewater	3,620	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,310	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,325	2	11	53.7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	3	5	20.7	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Somerville	25,000	3	8	16.7	1	.....	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	3	1
Springfield	33,000	2	7	11.1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
R. I ..... Providence	104,862	10	38	19.0	5	.....	.....	2	1	.....	.....	.....	8	.....	1	.....	.....	3	.....
Conn .... New Haven	62,861	12	27	21.0	1	.....	.....	1	.....	1	.....	.....	1	.....	.....	.....	.....	2	1
New Britain	14,000	.....	1	3.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury	20,300	3	7	18.0	1	.....	.....	1	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,206,507	256	631	26.8	94	27	9	55	7	13	38	.....	133	1	13	7	6	186	22
Brooklyn	566,689	106	273	25.2	44	20	.....	51	2	6	9	.....	46	.....	3	.....	.....	92	7
Yonkers	19,000	2	4	11.0	1	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....
Poughkeepsie	20,200	.....	5	13.0	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newburg	18,043	3	6	17.4	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utica	34,500	1	7	10.7	.....	.....	1	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Rochester	90,000	10	28	16.2	2	.....	.....	2	1	.....	1	.....	4	.....	.....	.....	2	6	.....
Buffalo	155,159	14	43	14.4	9	1	2	4	1	.....	3	.....	3	.....	.....	.....	.....	9	2
Watertown	10,666	1	4	18.8	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Cambridge	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	.....	2	17.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Little Falls	6,940	2	2	15.1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	24	64	16.0	10	2	1	1	.....	.....	3	.....	10	.....	4	.....	.....	10	1
Newark	138,000	19	57	21.8	7	5	.....	.....	2	2	.....	.....	9	.....	.....	.....	.....	7	.....
Orange	13,206	.....	1	4.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Camden	41,714	8	19	23.8	5	.....	.....	1	1	.....	.....	.....	2	.....	1	2	.....	4	.....
Plainfield	8,160	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	846,980	101	314	19.3	50	11	1	5	15	.....	13	.....	20	2	1	26	1	.....	.....
Pittsburgh	156,149	30	65	21.3	9	.....	1	8	2	.....	10	.....	8	1	.....	.....	.....	21	7
Erie	28,346	.....	3	5.6	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Del ..... Wilmington	44,000	4	12	15.7	1	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
Md ..... Baltimore	393,796	54	159	21.1	28	.....	3	8	4	2	11	.....	18	.....	1	.....	2	.....	.....
District of Columbia	180,000	25	74	21.4	17	.....	1	5	1	.....	.....	.....	10	.....	1	.....	.....	.....	.....
Va ..... Norfolk	26,200	7	15	30.3	1	.....	2	1	.....	1	.....	.....	2	.....	.....	.....	.....	6	1
Lynchburg	16,500	1	6	19.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. C ..... Wilmington	17,600	1	6	17.8	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
S. C ..... Charleston	57,000	4	15	36.3	3	.....	1	.....	.....	.....	.....	.....	3	.....	1	.....	.....	.....	.....
Ga ..... Augusta	27,012	4	14	27.1	1	.....	.....	1	.....	1	.....	.....	4	.....	.....	.....	.....	.....	1
Atlanta	38,000	4	13	17.6	1	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....
Rome	5,000	4	7	73.2	.....	.....	2	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....
Brunswick	2,900	.....	2	36.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Fla ..... Jacksonville	10,000	1	2	10.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	1	2	8.7	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....
Ala ..... Mobile	40,000	2	13	16.9	6	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Selma	7,505	.....	5	34.8	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Miss ..... Columbus	5,230	.....	2	40.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	24	85	20.5	17	.....	3	3	.....	5	1	.....	7	.....	.....	.....	.....	.....	6
Shreveport	8,033	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	1	5	36.5	1	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
Tex ..... Austin	16,000	2	3	9.8	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galveston	22,308	5	15	35.4	2	.....	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	1	6	14.2	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	4	20	23.6	.....	.....	2	.....	1	.....	.....	.....	3	.....	.....	.....	.....	2	.....
Clarksville	7,250	.....	2	14.4	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Memphis	34,000	9	22	33.8	3	.....	2	1	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	2
Shelbyville	1,919	2	3	81.5	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Ohio ..... Cincinnati	280,000	32	103	19.2	19	.....	4	1	4	1	2	.....	13	.....	.....	.....	.....	.....	.....
Cleveland	175,000	.....	44	13.1	3	1	1	1	3	.....	3	.....	4	.....	.....	.....	.....	.....	.....
Gallipolis	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	1	7	9.4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portsmouth	12,225	.....	2	9.2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Richmond	13,000	1	1	4.1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Evansville	30,000	4	6	10.4	2	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,298	82	194	20.2	16	9	4	16	4	1	3	.....	26	.....	5	1	1	52	9
Peoria	34,850	4	10	15.0	2	.....	.....	1	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....
Aurora	12,059	.....	2	8.7	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	1	3	10.5	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	1	3	17.8	.....	.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	115,781	32	51	22.8	2	3	.....	2	.....	.....	7	.....	5	.....	.....	.....	.....	15	.....
Minn .... Saint Paul	41,800	4	13	16.3	4	.....	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Mich .... East Saginaw	19,065	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint	9,000	1	5	29.0	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Lansing	8,850	1	2	11.5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa ..... Dubuque	27,000	.....	8	14.7	2	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....
Nebr .... Omaha	31,000	.....	1	1.7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah .... Salt Lake City	25,000	3	6	12.5	.....	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 11, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Colo.....Boulder	3,030	1	[illegible]	34.4	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Cal.....Sacramento	21,500	[illegible]	[illegible]	17.0	.....	.....	.....	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	1	4	19.2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	3	22.1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	7,379,465	1,063	2,961	22.8	451	105	49	221	64	41	121	1	444	7	36	36	14	433	74

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING DECEMBER 11, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass.....Boston	370,000	5,000	188	[illegible]	.....	.....
R. I.....Providence	101,062	3,800	35	[illegible]	28.1	41.2
Pa.....Philadelphia	815,182	31,798	292	22	18.8	36.1
Del.....Wilmington	38,000	6,000	10	2	11.1	17.4
Md.....Baltimore	338,384	55,412	125	34	19.3	32.7
District of Columbia	120,000	60,000	44	30	19.1	26.1
Va.....Norfolk	14,900	11,300	6	9	22.4	41.5
S. C.....Charleston	25,000	32,000	4	11	3.3	17.9
Ga.....Augusta	16,182	10,830	5	9	16.2	42.2
Atlanta	22,000	16,000	3	10	7.1	32.7
Brunswick	1,500	1,400	.....	2	.....	64.5
Fla.....Jacksonville	6,000	4,000	2	.....	69.6	.....
Ala.....Mobile	28,000	12,000	4	9	7.5	39.2
Selma	3,425	4,080	1	4	15.2	51.2
Miss.....Columbus	2,740	2,560	1	1	19.5	20.3
La.....New Orleans	159,128	57,231	49	36	16.1	32.8
Shreveport	3,917	4,116	.....	.....	.....	.....
Baton Rouge	2,954	4,233	.....	.....	.....	.....
Tex.....Austin	12,000	4,000	2	1	8.7	13.0
Galveston	17,064	5,244	13	2	41.2	19.9
Tenn.....Nashville	27,874	15,669	13	7	23.8	23.1
Memphis	17,293	16,707	9	13	27.2	40.6
Clarksville	4,000	3,250	1	1	13.0	16.1
Ohio.....Portsmouth	11,225	1,000	2	.....	9.3	.....
Totals	2,157,830	367,630	809	208	19.5	30.6

The following reports, for the week ending October 16, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 36; under 5 years, 16; consumption 3, diphtheria 3, enteric fever 2, scarlet fever 4, lung disease 3, measles 1, puerperal 1. Bath, Me., 8,000; deaths, 4; consumption 1, diphtheria 1, enteric fever 1, lung disease 1. Brattleboro', Vt., 6,000; deaths, 3. Calais, Me., 6,162; deaths, 2; under 5 years, 2. Carrollton, Miss., 600; death, 1. Chillicothe, Ohio, 11,000; deaths, 9; under 5 years, 1; consumption 4, lung disease 1. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 8,264; no deaths. Crystal Springs, Miss., 955; death, 1. Fayette, Miss., 400; no deaths. Gunn City, Mo., 125; no deaths. Huntingdon, Tenn., 1,200; no deaths. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; death, 1; consumption 1. Lebanon, Pa., 9,000; death, 1; enteric fever 1. Louisiana, Mo., 5,200; deaths, 3; under 5 years, 2; lung disease 1, accident 2. Madison, Ind., 9,009; deaths, 5; under 5 years, 1; pneumonia 1, accident 1. Milan, Tenn., 1,800; death, 1; lung disease 1. Milledgeville, Ga., 3,000; death, 1; under 5 years, 1; lung disease 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; deaths, 3. Muscatine, Iowa, 8,412; deaths, 4; malarial fever 1, scarlet fever 3. Muskegon, Mich., 11,300; deaths, 6; under 5 years, 2; diphtheria 1, malarial fever 2. Nebraska City, Nebr., 5,000; deaths, 2; diphtheria 1. Niles, Mich., 4,100; death, 1; consumption 1. Okolona, Miss., 2,000; no deaths. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 4; under 5 years, 2; diphtheria 1, malarial fever 1, accident 1. Pleasant Hill, Miss., 243; no deaths. Port Gibson, Miss., 1,200; deaths, 2; pneumonia 1. Santa Cruz, Cal., 5,000; no deaths. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 5; under 5 years, 2. Summit, Miss., 1,808; death, 1; lung disease 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 3; under 5 years, 1; consumption 1, lung disease 1. Winchester, Va., 5,000; deaths, 4; under 5 years, 1; consumption 1, lung disease 1. Winona, Minn., 10,000; death, 1. Youngstown, Ohio, 15,089; deaths, 3; under 5 years, 1; consumption 1, croup 1. Total population, 254,077; deaths under 5 years, 32; total number of deaths, 107; annual rate per 1,000, 22.0.

TUXPAN, MEXICO.—Dr. A. M. Boyd reports, for the month of November, 25 deaths, being at an annual rate of 41.7 per 1,000. The causes noted are: Consumption, 2; pneumonia, 1; asthma, 1; malarial fevers, 11; gastritis, 1; meningitis, 2; jaundice, 1; epilepsy, 2; paralysis, 1, and accidents, 3. No epidemic or contagious disease has occurred, and the sanitary condition is excellent.

SINGAPORE.—United States Consul A. G. Studer, under dates of November 1 and November 8, reports his consular district free from contagious, infectious, or epidemic diseases.

NOTICE.—The authorities of all cities supplied with the new form of postal card recently adopted by the National Board of Health are requested to return any remaining cards of the old form, and to fill up the new forms as completely as possible.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Canada	Montreal	185,000	Dec. 4	50	19.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	18.8
Do	Port Sarnia	4,000	Dec. 11	1	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Kingston	15,000	Dec. 11	15	48.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18.2
Bermuda	Hamilton	14,807	Nov. 30	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.5
Do	....do	14,807	Dec. 7	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.0
Cuba	Havana	195,437	Nov. 20	140	37.4	.....	.....	.....	5	.....	8	.....	4	.....	.....	.....	.....	.....
Do	....do	195,437	Dec. 4	137	36.6	.....	.....	.....	3	.....	10	.....	5	.....	.....	.....	.....	79.0
Hayti	Port au Prince	30,000	Nov. 24	32	55.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.0
Do	....do	30,000	Dec. 1	25	43.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89.0
Do	Aux Cayes	9,000	Nov. 20	4	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79.8
Do	....do	9,000	Nov. 27	4	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79.8
Do	Gonaives	6,000	Aug. 28	6	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89.0
Do	....do	6,000	Sept. 4	3	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88.0
Do	....do	6,000	Sept. 11	4	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.0
Do	....do	6,000	Sept. 18	6	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87.0
Do	....do	6,000	Sept. 25	1	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.0
Do	....do	6,000	Oct. 2	6	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88.0
Do	....do	6,000	Oct. 9	6	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89.0
Do	....do	6,000	Oct. 16	2	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.0
British Honduras	Belize	4,000	Nov. 20	3	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82.0
Do	....do	4,000	Nov. 27	3	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82.6
Aspinwall	Colon	2,500	Dec. 4	6	125.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86.0
Mexico	Matamoras	16,000	Dec. 4	19	62.0	.....	.....	.....	.....	300	13	.....	.....	.....	.....	.....	.....	.....
Do	Vera Cruz	20,000	Nov. 28	44	116.3	.....	.....	.....	25	.....	1	.....	.....	.....	.....	.....	.....	78.2
Ireland	Londonderry	30,884	Nov. 13	5	8.5	.....	.....	.....	.....	.....	.....	.....	.....	25	5	.....	.....	.....
Do	Queenstown	10,000	Dec. 4	10	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Dec. 4	103	29.4	.....	.....	.....	.....	.....	.....	23	3	.....	.....	7	4	44.4
Do	Dublin	314,666	Dec. 4	180	29.7	.....	.....	.....	.....	.....	2	.....	4	.....	.....	.....	15	46.0
Scotland	Dundee	155,100	Nov. 27	63	21.2	.....	.....	.....	.....	.....	.....	1	.....	1	.....	13	.....	37.1
Do	Leith	56,479	Dec. 4	30	26.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.4
England	London	3,664,169	Nov. 27	1,521	21.7	.....	.....	.....	.....	.....	19	.....	9	.....	2	.....	146	42.4
Do	Bristol and Clifton	213,500	Nov. 27	119	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	41.2
Do	Bradford	197,196	Nov. 27	63	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....
Do	Leeds	318,229	Nov. 20	116	19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	40.6
Do	Tunstall	27,775	Nov. 27	10	18.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.7
Do	....do	27,775	Dec. 4	12	22.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.0
Do	Liverpool	544,056	Dec. 4	241	27.9	.....	.....	.....	.....	1	.....	2	1	26	3	35	17	47.7
Wales	Cardiff	82,384	Nov. 27	30	18.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	40.3
Do	....do	82,384	Dec. 4	30	18.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	45.9
France	Rouen	104,209	Nov. 27	33	16.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	104,209	Dec. 4	47	23.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Havre	92,068	Nov. 20	55	31.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40.0
Do	....do	92,068	Nov. 27	50	28.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.2
Do	Paris	1,988,806	Dec. 2	941	24.6	.....	.....	.....	.....	.....	23	.....	26	.....	.....	.....	80	.....
Do	Lyons	342,815	Nov. 20	152	23.1	.....	.....	.....	.....	.....	3	.....	2	.....	.....	.....	7	.....
Switzerland	Geneva	83,077	Nov. 20	12	12.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	52,077	Nov. 27	19	19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Zurich	22,108	Nov. 13	7	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,108	Nov. 20	7	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,108	Nov. 27	10	23.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,262	Nov. 20	145	25.9	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	5	44.0
Do	....do	316,262	Nov. 27	156	27.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	40.0
Do	Rotterdam	148,123	Dec. 4	84	29.1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	58	2	.....
Germany	Berlin	1,096,044	Nov. 20	457	21.7	.....	.....	.....	.....	.....	.....	103	12	4	.....	121	63	45.0
Do	Bremen	109,000	Nov. 20	32	15.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Barmen	95,000	Nov. 27	30	16.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42.5
Do	Cologne	141,689	Nov. 27	87	33.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....
Do	Mannheim	50,500	Dec. 4	19	21.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.4
Do	Brunswick	74,000	Nov. 27	28	19.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	39.8
Do	Breslau	276,000	Nov. 20	170	32.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	42	44.8
Do	Hamburg	400,000	Nov. 13	187	24.4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	7	.....
Bavaria	Nuremburg	100,000	Nov. 13	46	24.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	37.8
Do	....do	100,000	Nov. 20	34	17.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	9	43.5
Belgium	Brussels	406,688	Nov. 20	145	18.5	.....	.....	.....	.....	.....	.....	22	6	.....	.....	16	2	43.3
Do	....do	406,688	Nov. 27	166	35.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....
Do	Antwerp	173,643	Nov. 20	84	25.2	.....	.....	.....	.....	28	10	35	4	.....	.....	2	.....	.....
Do	....do	173,643	Nov. 27	87	26.1	.....	.....	.....	.....	27	10	32	1	.....	.....	3	1	.....
Saxony	Leipsic	150,836	Nov. 27	44	15.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	39.5
Denmark	Copenhagen	235,254	Nov. 16	90	20.0	.....	.....	.....	.....	.....	.....	26	2	.....	.....	8	.....	41.0
Do	....do	235,254	Nov. 23	113	25.1	.....	.....	.....	.....	.....	.....	17	1	.....	.....	22	.....	35.3
Italy	Rome	304,192	Oct. 23	176	30.1	.....	.....	.....	.....	.....	33	.....	3	.....	.....	.....	6	63.6
Do	....do	304,192	Nov. 13	197	33.7	.....	.....	.....	.....	.....	30	.....	3	.....	.....	.....	10	60.2
Do	Genoa	188,009	Dec. 4	82	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50.0
Hungary	Buda-Pesth	344,694	Nov. 20	181	27.4	.....	.....	.....	.....	.....	2	.....	6	.....	.....	.....	8	.....
Roumania	Bucharest	177,646	Nov. 27	87	25.6	.....	.....	.....	.....	.....	1	.....	4	.....	1	.....	4	.....
Russian Poland	Warsaw	357,169	Nov. 20	133	19.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.5
Sweden	Stockholm	169,429	Nov. 13	95	30.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	33.8
Norway	Christiania	116,801	Nov. 20	45	20.4	.....	.....	.....	.....	.....	.....	9	2	.....	.....	13	8	23.4
Portugal	Lisbon	235,153	Nov. 6	122	28.2	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	56.3
Do	....do	255,153	Nov. 13	143	33.1	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	52.4
Do	Oporto	108,346	Nov. 6	65	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.2
Do	....do	108,346	Nov. 13	71	34.2	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	52.7
Spain	Malaga	115,882	Nov. 21	88	39.6	.....	.....	.....	.....	2	22	.....	.....	.....	3	.....	.....	61.0
Do	....do	115,882	Nov. 28	80	36.0	.....	.....	.....	.....	3	11	.....	.....	.....	.....	.....	.....	56.0
Do	Cadiz	65,029	Nov. 27	48	38.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63.2
Do	Seville	138,000	Nov. 28	77	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	6	57.2
Barbary	Tripoli	20,000	Nov. 20	11	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77.5
Do	....do	20,000	Nov. 27	12	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77.5
Cape Colony	Cape Town	35,000	Nov. 8	22	32.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75.0
Do	....do	35,000	Nov. 15	32	47.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.0
Seychelles Islands	Mahé	12,000	Oct. 9	4	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Oct. 16	4	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Oct. 23	2	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Oct. 30	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	12,000	Nov. 6	2	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morocco	Tangier	15,000	Nov. 6	30	104.3	.....	.....	.....	.....	3	2	.....	.....	.....	.....	.....	.....	61.3
Do	....do	15,000	Nov. 13	25	87.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	61.3
Do	....do	15,000	Nov. 20	23	80.0	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	59.2
Do	....do	15,000	Nov. 27	24	90.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58.8
Egypt	Alexandria	220,000	Nov. 13	198	46.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	220,000	Nov. 20	215	51.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	220,000	Nov. 27	195	46.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
India	Calcutta	429,535	Nov. 6	260	31.5	.....	19	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	77.2

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FOUR WEEKS ENDING NOVEMBER 6, 13, 20, AND 27, 1880, FROM THE FOLLOWING PLACES.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	2.7	12.3
Concord, N. H	2.8	19.4
Burlington, Vt	5.5	14.2
Boston, Mass	7.3	21.8
Cambridge, Mass	4.5	12.7
Edgartown, Mass	.....	10.0
New Bedford, Mass	3.8	17.2
Newburyport, Mass	6.5	19.5
Marblehead, Mass	12.2	26.2
Nantucket, Mass	.....	27.6
Plymouth, Mass	.....	9.2
Fall River, Mass	8.5	23.4
Lowell, Mass	6.3	17.9
Lawrence, Mass	6.9	14.4
Worcester, Mass	9.4	19.7
Lynn, Mass	9.5	21.4
Brockton, Mass	2.8	20.5
Holyoke, Mass	4.1	16.0
Bridgewater, Mass	3.6	17.9
Milford, Mass	4.3	22.7
Chicopee, Mass	6.0	16.7
Fitchburgh, Mass	4.1	18.6
Somerville, Mass	3.1	11.5
Springfield, Mass	5.1	12.7
Providence, R. I	3.7	17.5
New Haven, Conn	5.1	19.3
Waterbury, Conn	7.0	16.0
New York, N. Y	9.9	25.1
Brooklyn, N. Y	9.8	23.5
Yonkers, N. Y	2.1	7.7
Poughkeepsie, N. Y	2.0	14.3
Newburgh, N. Y	7.2	18.1
Rochester, N. Y	5.1	19.1
Buffalo, N. Y	7.0	16.4
Seneca Falls, N. Y	.....	10.9
Hudson County, N. J	6.1	17.7
Newark, N. J	6.1	20.5
Orange, N. J	6.0	17.0
Camden, N. J	5.0	12.5
Plainfield, N. J	3.3	17.9
Philadelphia, Pa	6.5	20.7
Pittsburgh, Pa	8.3	20.3
Erie, Pa	7.9	17.6
Wilmington, Del	8.0	21.5
Baltimore, Md	6.9	18.7
District of Columbia	8.4	20.0
Norfolk, Va	14.6	30.3
Richmond, Va	7.5	21.5
Lynchburg, Va	5.5	19.7
Wilmington, N. C	9.6	21.5
Charleston, S. C	6.6	24.1
Augusta, Ga	11.6	24.7
Atlanta, Ga	6.1	16.9
Rome, Ga	7.8	23.4
Jacksonville, Fla	1.3	26.1
Mobile, Ala	6.5	23.4
Selma, Ala	5.2	19.1
Columbus, Miss	10.0	17.5
Vicksburg, Miss	2.1	12.5
New Orleans, La	9.1	29.3
Shreveport, La	6.5	26.1
Baton Rouge, La	9.1	27.2
San Antonio, Tex	6.9	17.7
Austin, Tex	1.6	6.5
Galveston, Tex	10.5	29.2
Little Rock, Ark	7.1	14.8
Nashville, Tenn	3.2	14.7
Memphis, Tenn	11.1	34.8
Cincinnati, Ohio	4.9	16.1
Gallipolis, Ohio	2.9	20.3
Dayton, Ohio	1.3	7.7
Portsmouth, Ohio	2.3	11.5
Indianapolis, Ind	4.8	15.3
Richmond, Ind	11.3	21.6
Evansville, Ind	3.0	14.8
Peoria, Ill	6.3	16.4
Aurora, Ill	3.3	10.9
Jacksonville, Ill	3.5	9.6
Elgin, Ill	10.5	22.5
Milwaukee, Wis	12.6	24.3
Saint Paul, Minn	6.8	13.7
East Saginaw, Mich	2.1	8.9
Keokuk, Iowa	1.1	8.7
Omaha, Nebr	7.7	11.2
Lawrence, Kans	9.0	19.5
Salt Lake City, Utah	12.5	21.4
San Francisco, Cal	5.1	19.7
Sacramento, Cal		

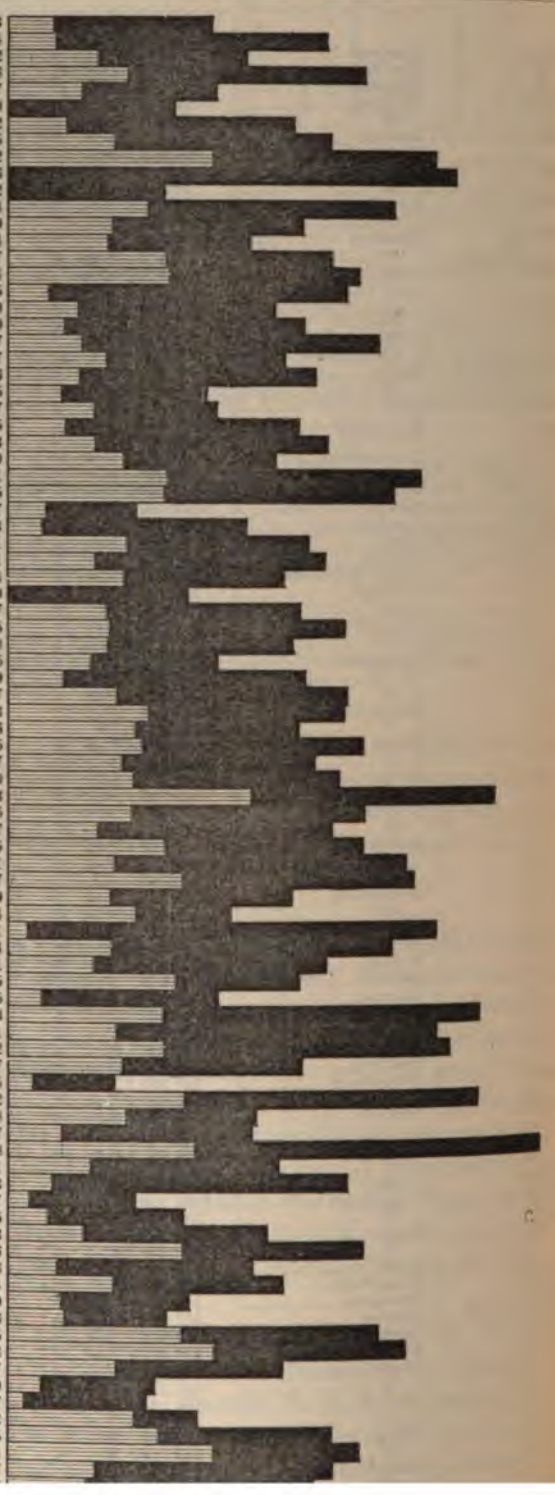

DIAGRAM EXHIBITING THE PROPORTION OF DEATHS PER 1,000 PER ANNUM, BY COLOR, AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH, FOR THE FOUR WEEKS ENDING NOVEMBER 6, 13, 20, AND 27, 1880, FROM THE FOLLOWING PLACES.

White under 5. Total White. Colored under 5. Total Colored.

	Under 5.		*Total—*	
Boston, Mass	White	7.1	White	21.6
Do	Colored	20.8	Colored	36.5
Providence, R. I	White	3.6	White	16.9
Do	Colored	6.8	Colored	34.3
Wilmington, Del	White	5.2	White	16.4
Do	Colored	15.2	Colored	23.9
District of Columbia	White	5.3	White	15.4
Do	Colored	14.5	Colored	29.1
Norfolk, Va	White	12.1	White	26.1
Do	Colored	18.5	Colored	36.9
Richmond, Va	White	3.0	White	11.1
Do	Colored	12.7	Colored	32.4
Charleston, S. C	White	2.1	White	21.9
Do	Colored	8.1	Colored	26.1
Augusta, Ga	White	10.5	White	22.6
Do	Colored	12.9	Colored	27.2
Atlanta, Ga	White	7.7	White	16.6
Do	Colored	4.1	Colored	18.0
Jacksonville, Fla			White	34.7
Do			Colored	13.0
Mobile, Ala	White	2.8	White	14.4
Do	Colored	15.2	Colored	44.6
Selma, Ala	White	3.8	White	19.0
Do	Colored	6.4	Colored	19.2
Columbus, Miss	White	4.9	White	9.8
Do	Colored	15.2	Colored	25.4
New Orleans, La	White	7.4	White	26.4
Do	Colored	14.1	Colored	37.4
Shreveport, La	White	6.6	White	36.6
Do	Colored	15.9	Colored	25.5
Austin, Tex	White	2.2	White	6.5
Do			Colored	6.5
Nashville, Tenn	White	2.7	White	10.5
Do	Colored	4.1	Colored	23.1
Keokuk, Iowa			White	5.8
Do	Colored	13.6	Colored	40.7
Lawrence, Kans	White	11.5	White	23.0
Do			Colored	7.7

excess of deaths, since it cannot be attributed to the unhealthy state of the country, and it has been ascribed to several causes, such as carelessness of mothers towards their children, faith in the efficacy of indigenous herbs which cause them to refuse the aid of medical practitioners, superstitious usages, constant exposure from want of proper clothing, the use of injudicious food, &c.; and it therefore becomes worthy of note that during the year 1879 the births have exceeded the deaths, a circumstance which the oldest colonist cannot remember.

The number of illegitimate children born yearly makes manifest the prevalence of concubinage.

The majority of the natives lead a roving life, and in many instances with hardly the semblance of a habitation. The natural resources of the country being so abundant, they have no fear of hunger, and live on what they obtain by fishing and hunting.

Although the adjacent West Indian Islands and the Brazils were to a considerable extent infected with yellow fever during the past year, this colony again escaped. The quarantine measures adopted during 1879 were on vessels arriving from West Indian and South American ports.

Population, births, deaths, and still-born.

Years.	Population.			
	Europeans.	Immigrants.	Natives.	Total.
1875	706	4,007	46,265	50,978
1876	652	3,608	44,181	48,441
1877	648	3,669	44,674	48,991
1878	597	3,490	44,188	48,275
1879	568	3,069	44,654	48,291

Years.	Births.					
	In wedlock.			Out of wedlock.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.
1875	201	143	344	686	629	1,315
1876	217	158	375	755	693	1,448
1877	171	144	315	626	660	1,286
1878	159	145	304	634	625	1,259
1879	187	188	375	689	715	1,404

Years.	Deaths.			Still-born.		
	Males.	Females.	Total.	Boys.	Girls.	Total.
1875	1,193	1,000	2,193	56	35	91
1876	1,041	852	1,893	57	38	95
1877	1,147	967	2,114	48	36	84
1878	902	757	1,659	52	47	99
1879	708	635	1,343	58	47	105

Meteorological observations at Paramaribo during the year 1879.

Annual mean of barometer (inches).			Annual mean of thermometer (Fahrenheit).			Temperature.	
8 a. m.	12 a. m.	6 p. m.	8 a. m.	12 a. m.	6 p. m.	Highest.	Lowest.
29.99	29.95	29.93	81°.3	86°.2	88°.5	88°.5	75°.6

Quantity of rainfall.	Number of days on which it rained.	Winds.		
		From January until April.	From May until August.	From September until December.
Inches.				
87.2	201	N., NE., E.SE., N.NE., E.SE. to S., N. through E. to SW.	NE. to S., NE. to W.	NE. to SE., N. to SW., N. to S.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

Under date of October 27, Señor Pedro J. Salicrup gives the following description of the city of San Juan, of Porto Rico, and its sanitary condition:

San Juan, the capital of the island of Porto Rico, the most populous city and the most important center of commerce of the island, is situated on the northern coast on an islet about two and a half miles long from east to west and half a mile in its widest diameter, surrounded by the bay that forms the harbor, which is sheltered and capacious, but its bottom is muddy and full of banks for want of cleaning, and the water extends into marshes lying to the southeast of the city. The population, according to the last census, is 23,240, of which 10,957 are males and 12,283 females; 10,977 whites and 12,263 colored. The thermometer stands about 79° Fahr. during the winter and reaches 86° Fahr. in the summer. The prevailing wind is the east trade-wind during the day, and the "Terral," or land breeze, at night, from March to October. From the beginning of November to the end of February a strong north wind sets in, accompanied by frequent showers, constituting the winter or rainy season. During the last months of summer there are frequent atmospheric changes accompanied by thunder-storms and very heavy showers.

The city proper is located on the western end of the islet, on a hill sloping to the south, and surrounded by high walls, with six gates, two to the north, two to the south, one to the east, and one to the west. The streets are rather narrow, paved with round stones, and have granite sidewalks. The buildings are constructed of solid masonry, with thick walls, high ceilings, and large doors in front and rear, which constitute all their means of ventilation, as they have no interspace between them. Their architecture is very simple; they are generally one or two stories high, with large balconies in front, flat roofs, and have a small yard at the rear paved with brick or granite, which contains the cistern for collecting rain-water, as there is no other water supply. The upper floor of two-story houses is generally inhabited by one family, and the lower is divided into tenements, in each of which a whole family dwells. These tenements are generally small (about 20 or 25 feet square), and have no other means of ventilation than through the door, which is closed at night; the front rooms open on the public street and the interior ones into the hall or the yard. Many low houses, of one story, are similarly arranged, and some contain twenty rooms with about eighty inhabitants. At the back part of the yard, and not very distant from the cistern, is the latrine, which, in houses that contain many inhabitants, often requires to be emptied; this is done indifferently in the day or night, and without the use of disinfectants, polluting the air of the whole neighborhood. All the washing of clothes is done in these yards, and the refuse water from this and other sources is either launched into the latrine or kept in receptacles to be poured on the public street after eleven o'clock at night. All yards have a small drain to the street for the surplus rain-water; though this dirty water is also allowed to flow, soiling the sidewalk and giving rise to very unpleasant odors, which are perceived all along the street. The city has no public drains, with the exception of a sewer which extends a small distance from the central square in the lower part of the town, in front of the city hall, to the harbor, where it opens at a short distance from the water and just at the point where ships anchor, and where some of the commercial stores are situated. This sewer was constructed with the object of collecting and carrying off the rain-water from the upper part of the city, which flooded the lower part. Some houses, however, situated in the vicinity of the sewer are connected with and drain into it, and as there is no more clean water to flush it than the rain-water, it happens that in dry weather the refuse water is charged with organic matters, which drain from these houses and stagnate in the sewer, giving origin to the formation of noxious gases, which escape through its openings, causing an intolerable stench to be perceived all along the course of the sewer. There are four public squares, which are simply open spaces paved with granite or cement, with some benches around; there are a few trees in two of them, but they are so small yet that they give no shade to the benches. There are two public walks situated outside of the city, well paved and with large trees, where people go in the evening to enjoy the fresh breeze. There is no public hospital in the city; they are constructing a very large building, which was originally designed for that purpose, situated at some distance from the town and near a large marsh, but before it is finished, they speak of assigning it to other purposes. There is a small hospital for female paupers, which contains twelve beds, sustained by charitable donations, managed by the bishop and a board of ladies, and served by a medical officer appointed by them. The sick poor are attended at their own houses by medical officers paid for that duty by the municipal council, and in cases of severe illness or wounds, they are taken to the military hospital, where a special ward is kept for the reception of such cases; but this is only done when the patient has no home or cannot be properly cared for by his family. The number is also limited, as the ward only contains thirty beds.

On account of the present small-pox epidemic, a special hospital has been improvised, with the object of isolating cases of this dis-

ease that might occur among the poor who inhabit crowded houses. It is located in old wooden barracks situated in the upper part of the city, is very well ventilated, and has done good service in preventing the spread of the disease. The military hospital, which is situated also in the upper part of the city and in a very crowded district, is an old brick building, arranged on the general wards system. It contains four wards, two for the treatment of sick soldiers, one for prisoners from the state and public prisons, and one for the sick poor. There is no special ward for contagious diseases, and all kinds of affections are treated in the same general ward. The mortality in this hospital has always been high, but especially so in the last two years, during which yellow fever and small-pox have been epidemic. The hospital is in charge of medical officers of the army, and the nursing of patients is done by Sisters of Mercy.

The public market, situated at the upper end of the city, is large, well ventilated, and clean. The public supply of meat is controlled by the municipal council, which assigns it to an individual, who is engaged to supply fresh meat to a certain hour in the day, at a fixed price, agreed on beforehand. The meat is retailed by butchers employed by the board and is of the worst quality, as most of the cattle used are old oxen, which after becoming useless for agricultural work are fattened for the purpose. Beef and pork are the meats most generally consumed. Mutton is little used. Fresh fish is always to be found. Vegetables are abundant. Many of the poor seldom use meat, which, besides being bad, is sold very dear. The slaughter-house is situated outside of the walls and to the north of the city near the sea, into which it drains; it is clean and well ventilated. In its neighborhood exist several old wooden houses inhabited by people who trade in tallow, and when this is being made a very unpleasant smell is produced, which, carried to the city by the north wind, causes great discomfort to the inhabitants of the upper part of the town.

The water used is rain-water collected and stored in cisterns which are built under ground; they are generally of great capacity, and the water contained in them pours from the house-roofs, which are very seldom swept, carrying with it the infinity of *debris* and organic matters which constitute the dust of cities, together with fragments of dead insects and other impurities, which settle in the bottom as a pultaceous sediment, leaving the supernatant water comparatively clear and pure; but every succeeding rainfall not only increases the quantity of sediment, but by its inflow stirs up that which had already accumulated, rendering the water impure until sedimentation is again accomplished. In dry weather, as there is little water in them, every time that water is drawn out this sediment is disturbed and renders it very turbid. Cisterns are cleaned when the impurity of the contained water forces itself upon the senses. This water is generally filtered for drinking purposes through sandstone filters, which render it clear and pure; but poor people drink it as it comes from the cistern. The scarcity of water in cisterns has been such in dry weather that on several occasions the local government has been compelled to bring water from rivers or other sources to supply the inhabitants, who otherwise had suffered the horrors of thirst. To the west of the slaughter-house, and at some distance from it, is the cemetery, which is very neat, but too small for the requirements of the population. It contains a chapel and a dead-house, and is encircled by a wall. Outside of this wall there is a place for the burial of persons who die of contagious diseases. The system of interment generally followed here is in niches, of which the municipal board owns a great number to hire for a term of three or five years, at the expiration of which time, if the lease is not renewed by the relatives of the deceased, the remains are removed to the charnel-house.

The prevailing diseases are all kinds of malarial affections during the summer and catarrhal affections in winter. Typhoid fever, liver, lung, and heart complaints, rheumatic, syphilitic, and skin diseases are common. Croup, measles, and whooping-cough appear occasionally as an epidemic among children, causing many deaths. Small-pox, yellow fever, and Asiatic cholera are epidemic diseases, which only appear when imported. The first-named disease is already endemic in the country, for since the epidemic which caused so many deaths in this city in 1875, and extended over the whole island, it has continued to exist with more or less intensity in different towns until it again appeared in epidemic form in this city at the beginning of 1879, and is reigning as such yet. According to official data the number of persons attacked by small-pox from October, 1879, to this date has been 549, and the number of deaths in the same period of time 185. Vaccination is compulsory and carried out once a week all through the year by the municipal medical officers, either at the city hall or from house to house, but most of the people have a great repugnance to it and often evade the law, because they think that when small-pox is epidemic vaccination sooner brings it on the person vaccinated, while others think it dangerous because they say that syphilis and other blood diseases are inoculated through it. The arm to arm vaccination is the method generally practiced, and when there are no pustules the fluid brought in tubes from England and other countries is used.

Yellow fever generally makes its appearance at intervals of eight or ten years; it is, as a rule, imported into this harbor from the neighboring island of St. Thomas, or some of the British islands where it originates, makes this city its stronghold, and extends to the whole island, excepting the towns situated in the mountainous districts, which thus far have enjoyed immunity from it, and after causing many deaths it gradually disappears until newly imported. At the beginning of May, 1879, two cases of yellow fever made their appearance on board of an English schooner arriving here from St. Thomas, which were admitted in the civil ward of the military hospital. One of them, a native of Nova Scotia, had the *black vomit*, but yet he recovered, suffering afterward from glandular enlargements. Subsequent cases of yellow fever appeared among the crews of foreign ships lying in this harbor, some from St. Thomas, where the disease was known to be epidemic at the time, and others that had been lying in the vicinity of the vessel in which the first case appeared. From this it spread to all the ships lying at anchor in the harbor and to the population on shore, beginning (as always occurs) among foreigners, and especially Spanish recruits, among whom it was very fatal, and extending afterward to the natives, continuing ever since, with more intensity in the summer and less in the winter months, until the present time, when some cases exist in the military hospital. The number of deaths from yellow fever among the civil population from October, 1879, to this date is 139. In the military hospital from the 1st of May of the present year to the 22d of October 226 cases of yellow fever have been admitted, with 106 deaths, 119 discharged, and 1 case remaining in hospital.

Asiatic cholera made its appearance for the first time in the year 1855, causing great mortality among the population of the whole island. It was imported into this island from St. Thomas through the port of Fajardo, a town on the east coast; thence it spread by contagion all over the country, decimating the population of some cities, and after visiting every town and settlement it disappeared. Since then it has not prevailed again.

The annual rate of mortality in this city is about 24.78 per 1,000, and the rate of births 25.98 per 1,000. Two boards of health exist in the city—the superior board, presided over by the governor of the island, which directs all sanitary matters of the province, and the local board, which is presided over by the mayor, and of which, among others, the medical officers of the municipal wards and the health officer of the port are members. This board controls all the sanitary arrangements of the city and its harbor. The quarantine regulations are very strict, and infected vessels or those arriving from infected ports, either with clean or foul bills of health, are quarantined for a term of from 5 to 20 days, according to circumstances. Diseases considered infectious are small-pox, Asiatic cholera, and yellow fever. All vessels coming from Cuba during the months of July and August, without regard to their bills of health, are considered suspicious, and are subject to a detention which may last from 1 to 5 days. There is a lazaretto which was built about three years ago on a barren islet situated at the entrance of the harbor to the west of the city, but this islet is surrounded by high reefs and the sea is so rough around it that only small boats, and in very good weather, can land on it, and on this account the said lazaretto had to be abandoned. When a vessel is put in quarantine it is ordered to be anchored in a certain part of the harbor separated from the rest; all communication with shore or other ships is strictly forbidden; and to enforce that provision a sanitary watch is placed at a certain distance from the vessel. Vessels bringing passengers and cargoes entering port with foul bills of health not wanting to keep the quarantine imposed upon them, as it often happens with steamers, are allowed to transfer their cargo to lighters which are isolated in the middle of the harbor during the quarantine period, and passengers are transferred to some schooner or other vessel which they have to procure at their own expense, and which is to be subject to the same rules; this involves great expense and trouble on the part of passengers, and occasions heavy losses to merchants, for the said lighters in rough weather often sink, or the merchandise is damaged by sea-water. There are many ordinances referring to sanitary matters, but they are disregarded by the inhabitants, as they are only enforced by the sanitary authorities when an epidemic exists.

Burial permits are required in this city, and since the beginning of the present year a certificate from the attending physician, stating the cause of death, is required by the municipal authorities before the permit is granted.

No comparative table of mortality from principal causes of death or any other kind of report is published by the board of health, and to obtain any information on those subjects causes much trouble and loss of time, as it has to be compiled from a record which is not intended for publication.

FORT ADAMS, R. I.—Under date of December 21, Dr. C. H. Crane, U. S. Army, reports an epidemic of measles among the troops, 32 cases having occurred since the middle of November. Six cases are still under treatment, but are convalescent.

HAVANA, CUBA.—For the week ending December 17, five deaths from yellow fever are reported, of which two were in the military hospitals. There were 10 deaths from small-pox during the week. The Spanish bark *Adela* which sailed for Brunswick, Ga., on the 15th, had been about a month at a wharf always foul, and often infected with yellow fever. The first mate of this vessel had a mild attack of yellow fever, and the patient remaining on board prevented fumigation of the vessel before her departure.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 18, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Portland	34,000	2	9	13.8	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Bangor	16,780	2	4	12.3	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
N. H ..... Concord	14,000	.....	6	22.2	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	16,500	.....	1	3.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	64	182	25.3	39	13	3	16	4	.....	.....	.....	23	3	7	.....	.....	.....	4
Cambridge	52,800	6	22	20.0	2	.....	.....	2	.....	.....	1	.....	3	1	.....	.....	.....	4	2
Edgartown	1,294	.....	1	40.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,286	4	9	17.2	1	3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Newburyport	13,800	.....	3	11.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marblehead	7,285	2	5	34.9	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Nantucket	3,726	.....	1	13.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	13	23	24.5	2	1	.....	1	.....	.....	.....	.....	4	1	.....	.....	.....	.....	.....
Lowell	59,485	9	19	16.7	6	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....
Lawrence	39,000	3	16	21.4	3	.....	1	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Pittsfield	12,300	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,295	9	24	21.5	3	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Lynn	38,284	5	10	13.6	2	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brockton	13,608	3	4	15.0	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	3	5	11.9	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Bridgewater	3,615	.....	3	43.0	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,310	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,325	1	3	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	1	3	12.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	4	8	16.7	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springfield	33,000	4	13	20.6	3	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	1
R. I ..... Providence	104,862	10	43	21.4	10	3	1	1	.....	.....	1	.....	5	.....	.....	.....	.....	7	.....
Conn .... New Haven	62,882	7	26	21.2	3	.....	.....	2	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Waterbury	20,300	2	8	20.6	1	.....	.....	1	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,206,507	244	651	27.6	114	38	7	34	6	9	38	.....	105	1	10	2	3	.....	25
Brooklyn	566,689	116	283	26.1	43	10	7	49	.....	4	4	.....	46	.....	1	.....	.....	84	6
Yonkers	19,000	2	4	11.0	.....	1	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Poughkeepsie	20,200	.....	2	5.2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Newburg	18,043	4	5	14.5	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Utica	34,500	1	9	13.8	1	.....	1	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Rochester	90,000	14	32	18.6	5	.....	.....	4	.....	.....	1	.....	3	.....	.....	.....	2	.....	1
Buffalo	155,159	14	53	17.7	6	2	1	8	1	.....	2	.....	5	.....	.....	.....	.....	15	1
Cambridge	1,850	1	1	29.1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	.....	1	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	33	73	18.2	7	10	1	3	1	.....	3	.....	10	.....	1	.....	.....	.....	2
Newark	138,000	24	47	18.0	8	5	.....	1	1	1	.....	.....	3	.....	.....	.....	.....	.....	.....
Orange	13,206	2	4	16.0	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Camden	41,714	5	16	20.0	3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Plainfield	8,160	.....	1	6.5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	846,980	90	391	24.1	63	7	3	5	17	.....	7	.....	47	.....	.....	40	1	.....	5
Pittsburgh	156,649	38	76	24.9	6	1	2	10	2	.....	9	.....	13	.....	1	.....	.....	.....	5
Erie	28,346	1	9	16.7	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2
Del ..... Wilmington	44,000	5	10	12.3	1	1	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1
Md ..... Baltimore	332,190	84	190	29.8	23	10	.....	14	5	.....	14	.....	22	.....	.....	.....	3	.....	7
District of Columbia	180,000	26	82	23.7	8	5	1	3	1	2	2	.....	10	.....	3	.....	1	.....	4
Va ..... Norfolk	26,200	1	9	18.2	.....	.....	.....	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1
Richmond	65,000	13	32	26.0	5	.....	2	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	2
Lynchburg	16,500	3	8	25.3	2	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
S. C ..... Charleston	57,000	15	31	28.3	6	2	1	.....	1	.....	.....	.....	8	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	3	8	15.3	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Atlanta	38,000	5	18	24.3	5	.....	.....	1	.....	.....	1	.....	4	.....	.....	.....	.....	.....	.....
Rome	5,000	1	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	1	2	10.4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	6	26	33.0	7	1	1	.....	1	.....	.....	.....	2	.....	.....	.....	.....	2	1
Selma	7,505	1	4	27.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss .... Columbus	5,230	3	3	30.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....
Natchez	7,000	1	2	14.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	.....	9	37.6	3	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	21	107	25.8	18	3	6	5	1	3	3	.....	6	.....	.....	.....	.....	.....	.....
Shreveport	8,033	.....	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Morgan City	2,018	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	2	2	14.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	20,597	1	10	25.3	3	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Waco	8,000	1	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Ark ..... Little Rock	22,000	5	10	23.7	.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	1	1	.....
Tenn .... Nashville	43,543	7	15	17.7	6	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Clarksville	7,250	.....	1	7.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Memphis	34,000	5	23	34.7	7	.....	.....	.....	.....	2	.....	.....	3	.....	1	.....	.....	.....	2
Murfreesboro'	3,850	.....	1	13.8	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shelbyville	1,919	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky ..... Louisville	175,000	17	49	14.4	9	2	.....	1	1	.....	2	.....	6	.....	.....	.....	.....	.....	3
Ohio .... Cincinnati	280,000	32	123	22.9	23	1	1	2	4	.....	2	.....	23	.....	1	.....	.....	.....	10
Cleveland	175,000	.....	46	13.9	4	2	.....	5	3	.....	2	.....	6	.....	.....	.....	1	.....	5
Gallipolis	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	2	13	17.4	6	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2
Portsmouth	12,225	2	7	32.3	3	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Ind ..... Indianapolis	75,350	4	15	10.2	2	.....	1	2	.....	2	.....	.....	2	.....	.....	.....	.....	4	2
Richmond	13,000	1	2	8.2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Evansville	30,000	2	10	17.4	2	.....	.....	.....	2	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,298	82	189	19.6	12	.....	4	30	1	1	6	.....	21	.....	6	.....	1	.....	.....
Peoria	34,850	6	8	12.0	2	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aurora	12,059	.....	4	17.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Jacksonville	15,000	1	3	10.5	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Elgin	8,770	4	7	41.6	.....	1	.....	.....	1	.....	1	.....	2	.....	.....	.....	.....	.....	1
Moline	8,000	.....	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	115,761	35	60	26.7	1	4	.....	6	3	.....	9	.....	7	.....	.....	.....	.....	28	.....
Beloit	5,000	.....	3	30.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 18, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrheal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Mich ....East Saginaw	19,065	.....	3	8.2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint	9,000	.....	[illegible]	11.6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Lansing	8,850	1	[illegible]	11.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa....Dubuque	23,000	3	9	16.6	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Keokuk	12,125	.....	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo .....Saint Louis	351,000	47	108	16.1	11	2	2	2	1	2	2	.....	33	1	2	.....	.....	.....	9
Nebr ....Omaha	31,000	2	12	20.7	2	.....	.....	1	.....	2	.....	.....	.....	.....	1	.....	.....	.....	1
Kans.....Lawrence	7,500	.....	5	30.1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo ....Boulder	3,030	1	3	51.7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	3	8	16.7	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Cal .....San Francisco	233,700	30	110	24.6	27	.....	1	1	2	.....	.....	.....	12	.....	.....	2	.....	8	.....
Sacramento	21,500	2	8	19.4	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....
Los Angeles	11,000	.....	3	14.4	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Vallejo	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	8,224,710	1,230	3,533	22.3	556	137	54	227	67	34	120	.....	485	9	38	44	16	155	115

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING DECEMBER 18, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	179	3	25.2	31.3
R. I.....Providence	100,862	3,800	40	3	20.7	41.2
N. Y .....New York	1,186,144	20,433	643	8	28.2	20.2
Pa .....Philadelphia	815,182	31,798	382	9	24.4	14.8
Del .....Wilmington	38,000	6,000	10	5	11.1	43.5
Md .....Baltimore	278,487	53,723	145	45	27.2	43.7
District of Columbia	120,000	60,000	63	19	27.3	16.5
Va.....Norfolk	14,000	11,300	2	7	7.5	32.3
Richmond	38,200	26,800	15	17	16.6	33.5
S. C .....Charleston	25,000	32,000	7	24	14.6	39.0
Ga. .....Augusta	16,182	10,830	5	3	16.2	14.1
Atlanta	22,000	16,000	9	9	21.3	29.3
Brunswick	1,500	1,400	.....	.....	.....	.....
Fla .....Jacksonville	6,000	4,000	2	.....	17.4	.....
Ala .....Mobile	28,000	12,000	13	13	24.2	56.6
Selma	3,425	4,080	2	2	30.5	25.6
Miss....Columbus	2,740	2,560	1	2	19.5	40.7
Natchez	3,500	3,500	1	1	14.9	14.9
La.....New Orleans	159,128	57,231	79	28	25.9	25.5
Shreveport	3,916	4,117	.....	2	.....	25.5
Baton Rouge	2,954	4,233	1	1	17.7	12.3
Tex.....Waco	5,000	3,000	3	.....	31.3	.....
Tenn ....Nashville	27,874	15,669	10	5	18.3	16.5
Clarksville	4,000	3,250	.....	1	.....	16.1
Memphis	17,293	16,707	13	10	39.2	31.2
Murfreesboro	2,000	1,850	.....	1	.....	29.0
Ky .....Louisville	153,125	21,875	36	13	12.3	31.9
Ohio .....Portsmouth	11,225	1,000	6	1	27.9	52.2
Iowa ....Keokuk	11,165	960	1	.....	4.7	.....
Kans ....Lawrence	6,800	1,700	5	1	38.4	30.7
Totals	3,474,002	426,796	1,673	233	25.1	28.5

The following reports for the week ending December 18 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 8; under 5 years, 2; accidents 1; consumption 1; puerperal 1. Allegheny, Pa., 78,000; deaths, 27; under 5 years, 10; consumption 5, diphtheria 2, enteric fever 2, scarlet fever 1, lung diseases 3, accident 5. Bath, Me., 8,000; deaths, 2; pneumonia 1. Belfast, Me., 5,308; deaths, 3; under 5 years, 2; consumption 1, malarial fever 2. Brattleborough, Vt., 6,000; deaths, 2; under 5 years, 1; scarlet fever 1, old age 1. Bucyrus, Ohio, 3,950; one death. Calais, Me., 6,162; deaths, 4; consumption 1, pneumonia 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 6; accident 1, consumption 2, pneumonia 1, old age 1. Circleville, Ohio, 6,400; old age 1. Clinton, Mich., 1,205; no deaths. Corinth, Miss., 2,264; deaths, 2, under 5 years; pneumonia 1. Dallas, Tex., 10,600; deaths, 5; under 5 years, 3; malarial fever, 2. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Helena, Mont., 3,630; deaths, 4; under 5 years, 2; croup 1, lung diseases 2, accident 1. Hernando, Miss., 1,000; no deaths. Huntingdon, Pa., 4,500; consumption 1. Huntingdon, Tenn., 1,200; no deaths. Indianola, Tex, 900; no deaths. Iuka, Miss., 816; no deaths. Kenosha, Wis., 5,500; deaths, 7; under 5 years, 1; consumption 3, diphtheria 2, pneumonia 1, puerperal 1. La Salle, Ill., 8,885; consumption 1. Madison, Ind., 9,009; deaths, 9; under 5 years, 1; consumption 2, diphtheria 3, enteric fever 1, scarlet fever 1, pleurisy 1, accident 1. Martinsburg, W. Va., 6,384; deaths, 4; diphtheria 2, enteric fever 1. Milan, Tenn., 1,800; pneumonia 1. Milledgeville, Ga., 3,000; no deaths. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; accident 1. Muscatine, Iowa, 9,312; deaths, 2; accident 1, croup 1. Muskegon, Mich., 11,309; deaths, 2. Nebraska City, Neb., 5,000; diphtheria 1, under 5 years. Niles, Mich., 4,100; deaths, 2; malarial fever 1. Pass Christian, Miss., 2,000; no deaths. Painesville, Ohio, 5,504; deaths, 3. Pearlington, Miss., 1,200; no deaths. Plymouth, Mich., 3,000; one death, under 5 years. Port Royal, S. C., 750; one death, under 5 years. Rensselaer, Ind., 900; no deaths. Ripley, Miss., 1,000; consumption 1. Rockland, Me., 7,500; deaths, 2; under 5 years, 1; consumption 1, diphtheria 1. Rock Island, Ill., 13,000; deaths 4; under 5 years, 2; croup 1, scarlet fever 2. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 6; under 5 years, 4. Summit, Miss., 1,808; one death. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 3; under 5 years, 1; consumption 1. Tuscaloosa, Ala., 2,000; no deaths. Winchester, Va., 7,000; deaths, 2; consumption 1. Winona, Minn., 10,000; deaths, 4; diphtheria 2, malarial fever 1, pneumonia 1. Youngstown, Ohio, 15,089; deaths, 3; under 5 years, 1; pneumonia 1. Total population, 329,370; total deaths, 127; deaths under 5 years, 36; annual death-rate per 1,000, 20.1.

DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

The Department of State, under date of December 24, informs the National Board of Health that the King of the Netherlands has appointed his minister to the United States, Mr. de Pestel, and also Dr. T. J. van Leent, of the Netherlands navy, to represent that government in the conference.

RIGA, RUSSIA.—United States Consular Agent P. Bornholdt, under date of December 8, reports that no statistics of births and deaths can be obtained. The general condition of the city is reported to be good, and the only contagious disease noted is small-pox, of which a few cases have occurred. The temperature has suddenly fallen from an average of 45° to 9° F., and an improvement in the health of the city is expected to follow the change.

SANTIAGO DE CUBA.—United States Consul J. C. Landreau reports for the month of November 191 deaths, in a population of 40,000, giving an annual death-rate of 58.1 per 1,000. Among the diseases noted are 72 cases and 53 deaths from yellow fever, 8 fatal cases of small-pox, and 16 cases with 6 deaths from typhoid fever. The cases of yellow fever were confined to the Spanish troops, and the port and shipping being free from contagious diseases, clean bills of health are issued.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Canada	Kingston	15,000	Dec. 18	7	22.8													26.2
Do	Montreal	135,000	Dec. 18	45	17.4								2				1	22.5
Cuba	Havana	195,437	Dec. 11	134	35.8				5		13		2					74
Spain	Trinidad	25,000	Oct. 9	26	54.3													
Do	....do	25,000	Oct. 16	35	73.0													
Do	....do	25,000	Oct. 23	29	60.5													
Do	.. do	25,000	Oct. 30	27	56.3													
Mexico	Acapulco	3,500	Nov. 13	5	74.6													84
Do	....do	3,500	Nov. 20	5	74.6													85
Aspinwall	Colon	2,500	Dec. 15	4	83.6													86
St. Helena	Jamestown		Nov. 13	3	25.1													74.6
Do	....do		Nov. 20	1	8.4													76
Do	.. do		Nov. 27	2	15.7													75.6
Ireland	Belfast	230,000	Dec. 11	83	23.7							24	5					48
Do	Dublin	314,666	Dec. 11	164	27.1								3		5		12	48.8
Scotland	Leith	58,479	Dec. 11	32	28.4												10	49
England	London	3,664,149	Dec. 4	1,446	20.6						10		14				149	
Do	Tunstall	27,775	Dec. 11	15	28.1								1					49
Do	Liverpool	544,056	Dec. 11	253	24.3						1	3		21	3	33	34	49.1
Do	Sheffield	304,938	Dec. 11	93	15.9													48.2
Do	Bristol and Clifton	213,500	Dec. 4	94	23.0								2				3	46.3
Do	Newcastle	149,366	Dec. 4	61	21.2												1	48
Do	Bradford	197,196	Dec. 4	75	19.8												6	
Do	Leeds	318,929	Nov. 27	113	18.5												12	
Wales	Cardiff	82,364	Dec. 11	30	18.9												4	49.5
France	Paris	1,988,806	Dec. 9	1,051	27.5						24		39				88	
Do	Havre	92,068	Dec. 4	55	31.1													38.3
Do	Rouen	104,209	Dec. 11	59	29.3													
Holland	Amsterdam	316,952	Dec. 4	142	25.4								2		2		3	41
Do	Rotterdam	148,123	Dec. 11	72	25.0											62	4	
Germany	Berlin	1,096,644	Nov. 27	477	22.6							127	25	5		134	62	40.2
Do	Bremen	109,000	Nov. 27	27	12.9												2	
Do	Barmen	95,000	Dec. 4	36	19.7												2	38.4
Do	Mannheim	50,300	Dec. 11	19	19.6													43.7
Do	Hamburg	400,000	Nov. 20	187	24.4												8	
Bavaria	Nuremburg	106,000	Nov. 27	40	20.9												7	39.6
Saxony	Leipsic	150,836	Dec. 4	65	22.4												6	34.7
Do	Chemnitz	101,115	Nov. 27	59	30.6								1				4	42
Denmark	Copenhagen	235,254	Nov. 30	68	15.1							13	2			12	1	42.3
Italy	Rome	304,192	Nov. 6	176	30.1						42		1				11	54
Do	Genoa	185,000	Dec. 11	73	20.7													55.4
Austria	Vienna	746,243	Dec. 4	332	20.1						11		5				20	37.9
Do	Trieste	128,233	Sept. 25	108	43.9						5		4				6	
Do	....do	128,233	Oct. 2	77	31.3						3		1					
Do	....do	128,233	Oct. 9	60	24.4								1				3	
Do	....do	128,233	Oct. 23	77	31.3						3		7					
Do	....do	128,233	Oct. 30	72	29.3								3					
Do	....do	128,233	Nov. 6	83	33.8						1		3					
Do	....do	128,233	Nov. 13	65	26.3						3		1					
Do	....do	128,233	Nov. 20	80	32.5						2		2				5	
Roumania	Bucharest	177,646	Dec. 4	116	36.0						2		7		1		12	
Hungary	Buda-Pesth	344,604	Nov. 27	227	34.3						7		7				10	
Russian Poland	Warsaw	357,169	Nov. 27	121	17.7						1							37.3
Sweden	Stockholm	169,429	Nov. 27	96	29.6								6		1		16	32.2
Spain	Cadiz	65,028	Dec. 4	54	44.3													62
Morocco	Tangier	15,000	Dec. 4	19	66.1							1						59
Barbary	Tripoli	20,000	Dec. 4	10	26.1													74
Cape Colony	Cape Town	35,000	Nov. 22	22	32.8													78
Egypt	Alexandria	220,000	Dec. 4	190	45.0													
India	Calcutta	429,535	Nov. 13	336	40.8		39						10		3		1	73.4

National Board of Health

BULLETIN.

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FOSTER. M. D. N.Y. 28th ST.

DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

The following advices have been received from the State Department by the National Board of Health:

December 28: A note from the British minister at this capital states that the Government of the Dominion of Canada has appointed Dr. J. C. Taché, deputy minister of agriculture in that colony, to represent it in the Conference.

December 28: According to a telegram from the minister of the United States at Stockholm, Count Carl Lewenhaupt, envoy extraordinary and minister plenipotentiary at Washington, will be appointed to represent Sweden and Norway at the Conference.

December 30: The ministers of China to the United States reply to the invitation to have a delegate present at the Sanitary Conference that, owing to the absence of telegraphic communication between Shanghai and Peking, there will not be time for a delegate to be appointed and to arrive before the termination of the Conference.

The diplomatic representative of Chili, now in this capital, Don F. S. Asta Buruaga, although not officially delegated, will attend at the Conference, and act according to subsequent instructions from his government.

A delegate, stated, through unofficial advices, to be Dr. Silva Amado, left Portugal on December 17; and the Portuguese minister at Washington, the Viscount das Nogueiras, has also been requested to attend.

In view of the official receptions which take place on January 1, the President has directed that the first official session of the Conference will be held in the Department of State on Wednesday, January 5, 1881, at noon.

The Department of State has communicated to the National Board of Health the following additional information concerning the representation of foreign governments at the Conference which is to assemble on the 5th instant:

The Turkish minister, Grégoire Aristarchi Bey, has been appointed to represent his government.

The Kingdom of Belgium appoints Mr. George Neyt, who is councilor of legation and at present chargé d'affaires here. Mr. Edward Léve, Belgian consul-general at Philadelphia, will also attend.

The Danish diplomatic representative, Mr. De Bille, is directed to attend, but has no authority to sign any convention until the same shall have been submitted for the approval of his government.

The delegate from Austria-Hungary, Count Bethlen, having been detained for a time, the councilor of the legation, Count Lippe, will act in his place.

The diplomatic agents of Bolivia, Hawaii, Hayti, and Peru have signified their intention to attend, under the recent decision of the Department of State that all such officers shall be admitted to the Conference without waiting for special orders from their respective governments.

SANITARY LEGISLATION IN KANSAS.

Dr. M. F. Leary, of Gaylord, Kans., offers the following draft of an act of legislature for obtaining and recording vital statistics:

GAYLORD, KANS., Dec. 20, 1880.—I have the honor to submit herewith for your approval a draft of a bill to be presented to the legislature at the coming session, establishing a registry of births and deaths in this State; and, while it is not presumed to be perfectly adapted to all communities, it is believed that it will serve to establish a thorough record and inspection, and prove a basis for additional regulations by local authorities.

The expense of the registry, after the purchase of the books, will be merely nominal.

It is needless to remind you of the value of such registry, not only to the medical profession for statistical purposes, but, in its varied legal aspects, to the State itself, and for the prevention and detection of crime.

Should this bill, or a kindred one, meet your approbation, it is hoped that you will lend your assistance in making it a law.

Very respectfully,

M. F. LEARY, M. D.

Be it enacted by the legislature of the State of Kansas:

1. That each city and township clerk in this State shall keep in his office two books, one of which shall be known as the Register of Births, and the other as the Register of Deaths, which books shall have suitable columns for the entry of all facts required; and said books will be a part of the city or township "records," and will contain a record of every child-birth and every death occurring in said city or township.

2. Every physician, surgeon, or midwife, attending professionally a child-birth, or, in the absence of such, the father or the mother of the child shall within ten (10) days after the birth of a child, furnish to the clerk of the city or township in which said birth has occurred, a statement in writing of the fact; which statement will contain the names of the father and the mother, their place of residence, the date of the birth and the locality thereof, and the sex and color of the child. The clerk, upon the receipt of such statement, will at once enter in the Register of Births, in the appropriate column, the information so given, with the name of the person furnishing it.

3. Within forty-eight (48) hours after the occurrence of the death of any person in this State, and before the removal of the remains for interment, the undertaker or other person having the interment in charge, shall obtain a "permit for interment" from the clerk of the city or township in which said death has occurred.

4. In applying for such "permit of interment," he shall present to the said clerk a "certificate of death" in writing, which said certificate shall contain the following facts in relation to the deceased, to wit: Name, age, sex, color, nativity if known, occupation when alive, married or single, date and locality of death, and disease or cause of death. Said "certificate of death" will be attested by the physician or surgeon attending deceased in last illness, or, in absence of such attendance, by any practicing physician having cognizance of the cause of death, or by the health officer, physician, or coroner of the city, township, or county in which the death occurred. Where persons are found dead and the cause of death is unknown, and persons die by unlawful means, the certificate of death will be attested by the coroner or a justice of the peace. But nothing in this act shall be construed as altering or interfering with the duties and powers of coroners as defined under the law.

5. The clerk of the city or township, having received such "certificate of death," will at once enter in the Register of Deaths, in the appropriate columns, the facts contained therein, with the name of the person attesting to the same, and the cemetery or locality where the remains will be interred. He will indorse on the "certificate of death" the fact of its entry, and a "permit for interment" in the cemetery or locality specified.

6. The "permit for interment" shall be filed in an appropriate book, with the records of the cemetery in which the body is interred; and no cemetery association in this State will inter any body until such "permit for interment" is presented. Persons dying without the State, whose bodies are brought within the State, will require a permit for interment.

7. For each child-birth recorded in the Register of Births and for each death recorded in the Register of Deaths, the city or township clerk making the same shall be entitled to receive the sum of ten (10) cents, to be paid out of the city or township funds.

8. The common council of each city and the township board of each township will cause to be procured the necessary books and blanks requisite for the purposes of this act, and the clerk of each city and township will keep on hand, for distribution as needed, printed certificates of births and deaths.

9. Whoever shall violate any provision of this act, or fail to comply therewith, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than five (5) nor more than twenty (20) dollars.

This act shall take effect and be in force from and after the 1st day of May, 1881.

YELLOW FEVER AT VERA CRUZ, MEXICO.

The journal entitled "*El Siglo Diez y Nueve*," published in the city of Vera Cruz, gives in its issue of December 1, the following statistics of mortality from yellow fever in that place for 14 years:

Month.	1867.	1868.	1869.	1870.	1871.	1872.	1873.
January	0	7	0	0	3	2	1
February	0	6	0	0	0	2	0
March	0	7	0	0	1	4	0
April	0	31	2	0	6	5	3
May	0	42	0	0	29	14	1
June	0	16	0	0	113	45	19
July	8	28	1	0	71	53	59
August	29	21	1	0	17	39	59
September	36	21	0	0	10	29	44
October	17	9	1	3	15	11	20
November	11	2	2	5	2	0	10
December	8	3	0	2	4	6	7
Total	109	193	7	10	271	210	223

Month.	1874.	1875.	1876.	1877.	1878.	1879.	1880.
January	1	7	0	0	16	6	2
February	2	2	1	1	5	4	0
March	0	4	1	0	0	2	1
April	0	11	0	0	1	1	0
May	2	29	0	4	7	1	0
June	3	93	2	7	58	1	0
July	11	118	4	54	114	2	1
August	24	105	7	144	110	1	3
September	7	41	9	164	62	3	10
October	12	13	6	77	45	0	42
November	11	2	1	50	24	0	44
December	6	0	3	27	7	0	0
Total	79	425	34	528	449	21	103

ABSTRACTS FROM CONSULAR REPORTS.

MALTA AND GOZO.—The report for the two weeks ending November 30 gives a total of 165 deaths, in a population of 154,830; there were 3 deaths from diphtheria, and 1 from typhoid fever. Annual death-rate, 27.2 per 1,000. Mean temperature, 67°.

MATAMOROS, MEXICO.—The report of United States Consul W. P. Sutton, for the week ending December 18, shows that small-pox is the prevailing disease. Of a total of 22 deaths, 17 were from small-pox, and 350 cases were believed to exist in the town of 16,000 inhabitants. The annual death-rate was over 71 per 1,000.

MOSCOW, RUSSIA.—United States Consul A. Weber, having received the official report of mortality for the year 1879, gives the following extracts from the same:

The population is estimated at 601,922, but is probably nearer to 700,000. There were 22,823 deaths during the year, so that the death-rate was between 32.6 and 37.7 per 1,000. Of the decedents 12,570 were males, and 10,253 females; under 5 years of age, 10,955. Among the latter were 256 deaths from inherited syphilis, leaving 22 deaths from that disease among adults and children over 5 years. The rate of mortality was excessive in one particular district, and especially in a large foundling hospital, established by Catherine II, in which 4,215 deaths occurred during the year. The general mortality for 1879 was less by 2,995 than that for 1878, and no epidemic of contagious disease is reported for the past year, the deaths from that class of affections not being above the average.

The report for the month of September gives 1,424 deaths, of which 71 were from typhoid fever and 124 from other contagious or infectious diseases. There were 355 deaths from diseases of the lungs, and 212 from diarrhœal diseases.

SINGAPORE.—United States Consul A. G. Studer reports 316 deaths during the month of October. Of these, the following causes are noted: Consumption, 24; other lung diseases, 13; fever, 78; diarrhœal diseases, 38; old age, 11.

ST. THOMAS, WEST INDIES.—Under date of December 7, United States Consul Victor Thompson states that some yellow fever and small-pox have been reported there. A letter of December 22 reports that yellow fever has become epidemic, and though not so rapid in its progress as in the United States and other places, is fully as fatal in St. Thomas as elsewhere. The disease may be considered endemic in the island, and the mode of treatment (not stated) is quite different from that adopted in other places.

VERA CRUZ, MEXICO.—The report of United States Consul S. T. Trowbridge for the month of December shows that during the two weeks ending on the 19th of that month there were 51 deaths from yellow fever and 2 from small-pox, out of a total of 111. The mortality for the month was 195, of which 92 deaths were from yellow fever; malarial fevers, 22; consumption, 17; other lung diseases, 7.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

ATTICA, WYOMING COUNTY, N. Y.—Dr. Julius A. Post, secretary of the county medical society, reports, under date of December 27, that during the fall and early winter typhoid fever and diphtheria have prevailed in that region to an unprecedented extent. The latter disease has been very malignant and fatal. Both diseases prevail in Wyoming and Genesee Counties, chiefly along the water-courses, and in such parts of the country as are so level as to prevent proper drainage. Attica has no local board of health.

BAD LANDS CANTONMENT, DAK. TER.—Under date of December 19, Dr. C. C. Miller, U. S. Army, reports from this post a case of small-pox in that neighborhood. The patient was removed to the care of her friends, and two weeks later the man who drove the vehicle had varioloid, having had small-pox previously; he recovered in one week. Strict quarantine was established at the post, and all the command vaccinated; no case has occurred among the troops.

ERIE, PA., Dec. 24.—Dr. E. W. Germer, health-officer, sends to the National Board of Health a specimen of "home-fed pork" being used by a family living about eight miles from Erie. In this family, the wife of a farmer named Charles Veit, and two children aged respectively two and three years, were taken sick about the same time. At the time, the cases were diagnosed as typhoid fever, and the disease was ascribed to pollution of the well-water from a privy situated only 25 feet from the well. Dr. Germer having examined the food of the family, finds the pork full of *trichina*, and ascribes the illness of those affected to that cause.

Dr. James H. Wroth, of Camden, N. J., under date of November 3, gives the following account of the late epidemic of small-pox in that place:

My information, gleaned from physicians, dispensary reports, and records of deaths, is as follows:

In February, 1880, a colored man, who had been engaged in whitewashing a house in Philadelphia where small-pox had existed, was taken with the disease. The case was reported, and, as far as professional authority could be exercised, quarantine established. Contrary to the physicians' orders, visits were made by friends and the disease broke out in a family (also colored) a few blocks distant, the children being attacked. One, if not two, died, having contracted the disease by the visit of their mother to the first patient, the mother herself escaping. From these foci the disease spread, being favored by the location. Its stronghold was the district between the two railroads, Walnut street and Kaighn's avenue, as shown by the map. In the southwest corner of this division are crowded together families, chiefly colored, many in one house, with no drainage or other sanitary provisions. On a visit made there I found the inhabitants of Sycamore street, between Seventh and Ann (see map), are compelled to go one-half block for water, or use that from two pumps that stand in the street suspiciously near the gutter. In addition, no provision seems to be made for garbage, as I am able to testify, having narrowly escaped a deluge of kitchen garbage that a servant was getting rid of in the manner peculiar to the locality, *i. e.*, by dumping it in the street. The cesspools are of the old-fashioned kind, and upon inquiry seemed to be rarely cleaned. In this district are families sleeping, eating, and cooking in one room, and in this district the disease obtained its most decided foothold.

Under these unfavorable conditions the dispensary physician succeeded in keeping the disease controlled to a certain extent. During his term (which expired by resignation July 10) he repeatedly urged upon the sanitary committee the necessity of a hospital, but as they considered fumigation with sulphurous acid sufficient, nothing definite was done until July, when a hospital was erected on vacant lots between the seventh and eighth wards. The near proximity of a private residence led to the granting of an injunction, which was argued July 26 and not sustained. This hospital has been in daily use to this time.

At the time of erection the medical profession protested against its situation, it being near the spot formerly utilized by the cesspool cleaners to dump the contents of their carts, and having to the northwest a small creek, or rather ditch, which receives the contents of the Tenth street sewer and drains the marsh, at the head of which stands the hospital. The hospital itself stands upon sandy ground, little higher than the marsh, and is supplied with water from a well upon the premises. In protesting against the site, the profession suggested the use of a bluff on Cooper's Creek, on the outskirts of the city and at an elevation of between 30 to 50 feet above low-water

mark. There the land is gravelly, steep enough to furnish good drainage, and is fully as isolated as the present location. To this the committee objected on account of cost, it being necessary to lease the land, whereas the present hospital being built upon or near the intersection of unopened streets, the charge would be little or none. A memorial to the council, sent through the sanitary committee, to erect in a suitable locality a permanent hospital has, thus far, been tabled.

In the latter part of June a proposition was made by a manager of the dispensary to the sanitary committee, stating that, as the disease was confined to a certain locality, volunteer physicians would, if the city provided virus, proceed to the spot and, with the aid of the police, vaccinate every person (man, woman, and child) within the district. Physicians were ready, but the committee took no notice of the offer until August 18, when they stated that the physicians should "go ahead." As the disease was then a general instead of a local one, and the offer having been made forty days previously, the physicians very properly declined to proceed as volunteers.

In the mean while several conferences were requested by the city medical society, but at none was any member of the sanitary committee present save the chairman. Vaccination and quarantine were requested by the society, and, although the ordinance creating the said committee gave it discretionary power regarding quarantine, they have, so far, declined to inforce it, and also declared that they had no power to dispose of the clothing, &c., of a patient unless declared a nuisance, and then only at the expense of the patient. Seeing that there was nothing to be obtained from the local authorities, Dr. E. M. Hunt, of the State board, was requested to meet the society and the sanitary committee were invited to be present. This request brought a full attendance. Dr. Hunt's views, the same as originally stated by the city society, were vaccination and quarantine.

In addition, the request was made that the committee should organize under State law, so as to obtain greater powers. The last, I regret to state, has not been done. Free vaccination was ordered and carried out, about 8,000 persons, as estimated, being already protected, and thus having to pay for what had been a gratuitous offer. This vaccination probably has had an effect in reducing the death-rate. I am unable to say what effect it had upon the number of cases. The rapid extension of the disease seems to be due to the lack of protection, especially among the young, although cases are reported with good vaccine scars, and others who have contracted the disease for the second time. Although at present it seems to be on the decrease, the approach of cold weather with its attendant crowding of families is watched with attention by the profession.

I would also state that, in October, I noticed the non-report of a death in hospital. This led me to inquire into the matter, and I found 29 unreported deaths occurring during August and September. No information could be obtained from the authorities, and I determined to obtain definite reports, so I at once informed the State board of the discrepancy, with the result of bringing in the certificates. Since then I have learned of 5 deaths from small-pox yet unreported. My reasons for not reporting this to the National Board of Health have been a vain hope of inducing the committee to act in concert with me and the nearness of the end of the quarter. The committee bury those who die at the hospital, no burial permit being taken out from the clerk's office. Full facts are probably in possession of the inspector, but are, at present, not available. Since my appointment as dispensary physician all reports have been sent to me, and they have furnished me the only means for detecting the above cases, and I would add that there *may* be others still unreported.

In addition to the above report, the following extract from the sanitary inspector's record is given:

Total number of cases, 435; white, 313; colored, 122; under 5 years, white, 43; colored, 30. In 41 cases, as recorded in hospital, no record was kept of previous vaccination or of the diagnosis. These cases are omitted in the following statement: Diagnosed as varioloid, 91 cases; as variola, 103 cases. The number of patients who had been vaccinated was 148; of these, 70 cases were diagnosed as variola, and 78 as varioloid. Of those who had not been vaccinated, 153 were reported as cases of variola, and 13 as varioloid. At the close of the report, November 22, the disease had not entirely disappeared, and there was some apprehension of a new outbreak when the people were more crowded together on account of the colder weather.

NOTICE.—The authorities of all cities supplied with the new form of postal card recently adopted by the National Board of Health are requested to return any remaining cards of the old form, and to fill up the new forms as completely as possible.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

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REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 25, 1880.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Me ..... Portland	34,000	2	12	18.4	2	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Bangor	16,780	2	4	12.3	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	.....	4	14.8	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	11,364	.....	3	9.5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	81	204	28.4	32	8	1	28	3	.....	.....	.....	35	9	3	.....	.....	.....	8
Cambridge	52,800	6	14	12.7	3	1	.....	1	.....	.....	.....	.....	5	.....	.....	.....	1	.....	.....
Edgartown	1,294	.....	1	40.2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,286	4	11	21.0	4	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Newburyport	13,800	2	4	14.9	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Marblehead	7,285	2	6	41.9	.....	.....	.....	4	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Nantucket	3,726	.....	2	27.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	8	24	25.6	7	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Lowell	59,485	5	12	10.6	2	.....	.....	1	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Lawrence	39,000	5	15	20.4	3	.....	1	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....
Pittsfield	12,300	.....	1	4.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,295	10	17	15.2	.....	.....	1	.....	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....
Lynn	38,284	6	13	17.7	2	1	.....	1	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....
Brockton	13,608	.....	3	11.2	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	.....	7	16.5	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Bridgewater	3,615	.....	1	14.3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Milford	9,310	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicopee	11,325	.....	2	9.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Fitchburg	12,500	3	7	28.9	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Somerville	25,000	5	12	25.0	4	.....	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Springfield	33,000	2	11	17.6	2	1	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
R. I ..... Providence	104,862	9	40	19.9	6	.....	.....	1	.....	.....	1	.....	4	.....	1	.....	.....	4	2
Conn .... New Haven	62,882	1	17	13.9	3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,206,507	262	647	27.4	100	28	3	51	1	5	33	.....	133	1	9	3	3	.....	17
Brooklyn	566,689	119	292	27.0	44	13	3	34	1	7	12	.....	45	.....	3	.....	1	.....	4
Yonkers	19,000	2	3	8.2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poughkeepsie	20,200	1	5	13.0	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Utica	34,500	5	8	11.3	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1
Buffalo	155,159	16	64	21.5	7	1	.....	7	3	.....	2	.....	2	.....	.....	.....	.....	.....	10
Watertown	10,666	1	4	19.6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge	1,850	.....	1	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Little Falls	6,940	.....	2	15.1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarrytown	3,276	.....	1	15.9	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	209,000	21	90	22.5	7	2	.....	3	4	.....	2	.....	17	1	3	.....	.....	.....	3
Newark	138,000	19	51	19.5	8	3	2	3	.....	.....	.....	.....	6	.....	1	.....	.....	.....	.....
Camden	41,714	4	12	15.0	2	.....	1	.....	.....	.....	1	.....	1	.....	.....	1	.....	.....	.....
Plainfield	8,160	1	3	19.6	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	846,980	84	319	19.7	57	3	.....	6	7	.....	9	.....	32	.....	.....	38	1	.....	3
Pittsburgh	156,649	19	55	18.0	7	2	.....	5	2	.....	12	.....	6	.....	.....	.....	.....	.....	3
Erie	28,346	.....	5	9.3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Del ..... Wilmington	44,000	4	13	16.0	3	2	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1
Md ..... Baltimore	332,190	76	149	23.4	13	4	4	8	4	.....	6	.....	23	.....	2	.....	5	.....	5
District of Columbia	180,000	23	69	20.0	13	4	.....	4	1	1	.....	.....	17	.....	.....	.....	.....	.....	2
Va ..... Norfolk	26,200	2	12	24.2	1	1	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Richmond	65,000	9	22	17.9	2	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	2	.....	1
Lynchburg	16,500	1	5	15.8	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C ..... Charleston	57,000	9	27	24.6	6	.....	1	1	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....
Ga ..... Augusta	27,012	6	13	25.2	2	.....	1	1	.....	.....	.....	.....	2	.....	1	.....	.....	.....	1
Atlanta	38,000	2	10	13.5	2	.....	.....	.....	.....	1	.....	.....	4	.....	.....	.....	.....	.....	1
Rome	5,000	.....	2	20.9	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick	3,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	1	4	20.9	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	12,000	3	4	17.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	40,000	5	15	19.5	2	1	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	3	1
Selma	7,505	2	6	41.7	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Montgomery	17,000	2	6	18.2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Miss .... Columbus	5,230	1	2	20.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Vicksburg	12,500	.....	6	25.1	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	33	98	23.6	21	3	5	2	.....	3	1	.....	7	.....	.....	.....	1	.....	4
Shreveport	8,033	.....	1	6.5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	.....	2	14.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex ..... San Antonio	20,597	1	6	15.2	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Galveston	22,308	7	12	28.1	2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1
Ark ..... Little Rock	22,000	1	5	11.9	.....	1	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Tenn .... Nashville	43,543	5	14	16.5	4	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Clarksville	7,250	1	3	21.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro'	3,850	.....	1	13.8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Memphis	34,000	7	20	30.7	1	1	.....	1	2	1	.....	.....	4	.....	.....	.....	.....	.....	1
Shelbyville	1,919	2	2	54.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio ..... Cincinnati	280,000	22	82	15.3	17	.....	6	.....	5	.....	3	.....	11	.....	1	.....	.....	.....	.....
Cleveland	175,000	.....	66	19.7	7	5	3	5	2	.....	3	.....	8	.....	.....	.....	.....	.....	3
Gallipolis	4,500	2	4	46.4	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton	39,000	2	7	9.4	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	2	.....
Portsmouth	12,225	.....	3	13.8	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	13	34	23.2	6	.....	.....	1	3	1	.....	.....	6	.....	.....	.....	.....	.....	.....
Richmond	13,000	2	7	28.9	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	2
Evansville	30,000	3	7	12.2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill ..... Chicago	503,298	63	160	16.6	12	22	1	16	6	1	2	.....	19	1	5	6	.....	.....	5
Peoria	34,500	5	10	15.0	.....	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....
Aurora	12,050	1	2	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	.....	1	3.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin	8,770	.....	2	11.9	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,200	2	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Wis ..... Milwaukee	115,761	24	42	18.8	2	1	.....	4	.....	.....	6	.....	7	.....	.....	.....	.....	.....	.....
Beloit	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING DECEMBER 25, 1880—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	Fever. Enteric.	Fever. Malarial.	Fever. Scarlet.	Fever. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Mich ....East Saginaw	19,065	1	4	11.0	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Flint	9,000	2	7	40.6	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansing	8,500	.....	2	11.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo.....Saint Louis	351,000	33	107	15.9	11	2	1	.....	.....	.....	1	.....	23	1	1	.....	.....	.....	4
Nebr ....Omaha	31,000	.....	2	3.5	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Colo .....Boulder	3,030	.....	1	17.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ....Salt Lake City	25,000	7	13	27.1	.....	.....	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....	3	.....
Cal .....Sacramento	21,500	3	7	17.0	.....	.....	.....	.....	.....	.....	1	.....	.....	2	.....	.....	.....	.....	1
Los Angeles	11,000	2	3	14.4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	4	29.4	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Totals	7,681,472	1,098	3,118	20.9	461	120	40	205	50	26	103	.....	479	15	32	48	14	12	92

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING DECEMBER 25, 1880.

States and cities.	Population. White.	Population. Colored.	Number of deaths. White.	Number of deaths. Colored.	Annual death-rate per 1,000. White.	Annual death-rate per 1,000. Colored.
Mass ....Boston	370,000	5,000	203	1	28.6	10.4
R. I.....Providence	101,062	3,800	37	3	19.1	41.2
N. Y ....New York	1,186,144	20,433	640	7	28.1	17.9
Pa.....Philadelphia	815,182	31,798	297	22	20.0	36.1
Del .....Wilmington	38,000	6,000	11	2	12.2	17.4
Md .....Baltimore	278,478	53,723	101	48	18.9	46.6
District of Columbia	120,000	60,000	42	27	18.2	23.4
Va.....Norfolk	14,900	11,300	10	2	37.4	9.2
Richmond	38,200	26,800	7	15	7.8	29.5
S. C.....Charleston	25,000	32,000	10	17	20.8	27.6
Ga.....Augusta	16,182	10,830	8	5	25.9	23.4
Atlanta	22,000	16,000	4	6	9.5	19.6
Brunswick	1,600	1,400	.....	.....	.....	.....
Fla .....Jacksonville	6,000	4,000	1	3	8.7	39.1
Key West	8,000	4,000	4	.....	26.1	.....
Ala .....Mobile	28,000	12,000	6	9	11.8	39.4
Selma	3,425	4,080	1	5	15.2	63.9
Miss ... Columbus	2,760	2,540	2	1	39.1	20.3
La.....New Orleans	159,128	57,231	53	45	17.3	41.1
Shreveport	3,916	4,117	1	.....	13.3	.....
Baton Rouge	2,954	4,233	2	.....	35.3	.....
Tex.....Galveston	17,064	5,244	10	2	30.2	19.9
Tenn ...Nashville	27,874	15,669	6	8	11.0	26.4
Clarksville	4,000	3,250	.....	3	.....	48.2
Memphis	17,293	16,707	14	6	42.2	18.7
Murfreesboro	2,000	1,850	.....	1	.....	29.0
Shelbyville	1,176	743	.....	2	.....	140.4
Ohio .....Portsmouth	11,125	1,000	2	1	9.3	52.2
Totals	3,321,463	415,728	1,472	241	23.0	30.2

The following reports for the week ending December 25 are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 4. Allegheny, Pa., 78,000; deaths, 22; under 5 years, 5; consumption 1, diphtheria 1, enteric fever 5, scarlet fever 3, pneumonia 1. Bath, Me., 8,000; deaths, 2; enteric fever 1. Brattleborough, Vt., 6,000; no deaths. Bucyrus, Ohio, 3,950; one death. Calais, Me., 6,162; deaths, 3; under 5 years, 2; consumption 1; croup 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 2; accident 1. Circleville, Ohio, 5,996; no deaths. Clinton, Mich., 1,200; no deaths. Corinth, Miss., 2,264; death, 1, under 5 years 1. Crystal Springs, 955; deaths, 2; pneumonia 1, puerperal 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Helena, Mont., 3,630; deaths, 2; diphtheria 1. Hernando, Miss., 1,000; deaths, 4. Huntingdon, Pa., 4,500; no deaths. Huntingdon, Tenn., 1,200; death, 1; pneumonia 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; death, 1. Jefferson, Tex., 3,251; death, 1; under 5 years, 1. Kenosha, Wis., 5,500; death, 1; consumption 1. La Salle, Ill., 8,785; death, 1; under 5 years, 1; accident 1. Lebanon, Pa., 9,000; deaths, 5; under 5 years, 1; croup 1, enteric fever 1, lung disease 1. Louisiana, Mo., 5,200; deaths, 2; under 5 years, 1; pneumonia 1, measles 1. Madison, Ind., 9,009; deaths, 4. Martinsburg, W. Va., 6,384; deaths, 3; under 5 years, 1; puerperal 1. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; no deaths. Monmouth, Ill., 6,000; death, 1. Morton, Miss., 203; no deaths. Mount Pleasant, Iowa, 4,500; death, 1; under 5 years, 1. Muscatine, Iowa, 8,412; deaths, 2; consumption 1, scarlet fever 1. Muskegon, Mich., 11,300; deaths, 2; under 5 years, 1; diarrhœa 1, diphtheria 1. Niles, Mich., 4,200; death, 1; bronchitis 1, Okolona, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; death 1; diarrhœa 1. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; death, 1; under 5 years, 1. Rensselaer, Ind., 900; no deaths. Ripley, Miss., 1,000; deaths, 2; under 5 years, 1; consumption 1, whooping-cough 1. Rock Island, Ill., 12,000; death, 1. Santa Cruz, Cal., 5,000; death, 1; pneumonia 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 4; under 5 years, 2. Summit, Miss., 1,808; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 2; enteric fever 2. Tuscaloosa, Ala., 2,000; death, 1. Winchester, Va., 5,000; deaths, 3; consumption 1, croup 1. Youngstown, Ohio, 15,089; deaths, 3; under 5 years, 2; croup 1. Total population, 309,808; deaths under 5 years, 22; total number of deaths, 85; annual death-rate per 1,000, 14.7.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Canada	Kingston	15,000	Dec. 25	5	16.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17.4
Do	Port Sarnia	4,000	Dec. 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bermuda	Hamilton	14,867	Dec. 14	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66.5
Do	...do	14,867	Dec. 21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
Cuba	Havana	195,437	Dec. 18	145	38.7	.....	.....	.....	4	.....	15	.....	.....	.....	.....	.....	.....	73
Hayti	Aux Cayes	9,000	Dec. 4	4	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
Do	...do	9,000	Dec. 11	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
Do	Port au Prince	30,000	Dec. 8	28	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
Do	...do	30,000	Dec. 15	16	27.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
Mexico	Vera Cruz	20,000	Dec. 12	58	153.5	.....	.....	.....	29	.....	1	.....	.....	.....	.....	.....	.....	76
Do	...do	20,000	Dec. 19	53	140.3	.....	.....	.....	22	.....	1	.....	.....	.....	.....	.....	.....	80
Do	Matamoras	16,000	Dec. 18	22	71.7	.....	.....	.....	.....	350	17	.....	.....	.....	.....	.....	.....	.....
Brazil	Rio de Janeiro	330,000	Nov. 20	193	30.5	.....	.....	.....	1	.....	.....	.....	4	.....	1	.....	6	.....
Do	...do	330,000	Nov. 27	163	25.8	.....	.....	.....	2	.....	.....	.....	1	.....	1	.....	3	.....
Azores	Fayal	7,630	Oct. 9	2	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Do	...do	7,630	Oct. 16	4	27.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
Do	...do	7,630	Oct. 23	2	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Do	...do	7,630	Oct. 30	2	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Do	...do	7,630	Nov. 6	3	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
Do	...do	7,630	Nov. 13	4	27.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
Do	...do	7,630	Nov. 20	3	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
Teneriffe	Santa Cruz	16,610	Nov. 6	14	44.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.8
Do	...do	16,610	Nov. 13	10	31.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68.7
Do	...do	16,610	Nov. 20	8	25.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Do	...do	16,610	Nov. 27	10	31.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66.7
St. Helena	Jamestown	6,240	Dec. 4	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74.9
Ireland	Queenstown	10,000	Dec. 18	5	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland	Leith	58,479	Dec. 18	29	25.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	34.5
England	Tunstall	27,775	Dec. 18	15	28.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	42.4
Do	London	3,664,149	Dec. 11	1,398	19.9	.....	.....	.....	.....	.....	12	.....	5	.....	2	.....	139	47.7
Do	Liverpool	544,056	Dec. 18	220	20.1	.....	.....	.....	.....	.....	.....	6	2	24	5	25	23	40.9
Do	Newcastle	148,000	Dec. 11	57	19.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	49
Do	Bristol and Clifton	213,500	Dec. 11	98	18.8	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	11	.....
Do	Bradford	197,196	Dec. 11	72	19.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Wales	Cardiff	82,364	Dec. 18	25	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	45.6
France	Paris	1,988,806	Dec. 18	1,031	27.0	.....	.....	.....	.....	.....	23	.....	21	.....	.....	.....	97	.....
Do	Rouen	104,209	Dec. 18	36	17.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Lyons	342,815	Nov. 27	147	22.3	.....	.....	.....	.....	.....	9	.....	3	.....	.....	.....	5	.....
Do	...do	342,815	Dec. 4	157	23.3	.....	.....	.....	.....	.....	3	.....	4	.....	.....	.....	4	.....
Do	Havre	92,068	Dec. 11	52	29.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36.5
Switzerland	Zurich	22,103	Dec. 11	7	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	Dec. 11	143	23.5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	48
Do	Rotterdam	148,123	Dec. 18	73	25.3	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	50	3	.....
Germany	Berlin	1,096,644	Dec. 4	548	26.0	.....	.....	.....	.....	.....	.....	51	34	2	.....	127	67	38.5
Do	Breslau	276,000	Nov. 27	178	33.6	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	28	40.1
Do	...do	276,000	Dec. 4	155	28.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	26	36.3
Do	Hamburg	400,000	Nov. 27	192	25.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....
Do	Frankfort	130,000	Dec. 4	49	19.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	39.2
Do	...do	130,000	Dec. 11	49	19.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39.6
Do	Bremen	109,000	Dec. 4	43	20.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Barmen	95,000	Dec. 11	30	16.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	38.5
Do	Mannheim	53,000	Dec. 18	13	13.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.2
Do	Brunswick	74,000	Dec. 11	38	26.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	43.5
Saxony	Chemnitz	101,115	Nov. 27	50	25.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	45
Do	...do	101,115	Dec. 4	52	27.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
Do	Dresden	220,500	Nov. 27	90	21.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	11	41.9
Do	...do	220,500	Dec. 4	99	23.4	.....	.....	.....	.....	.....	.....	3	3	.....	.....	15	15	35.5
Do	Leipsic	150,836	Dec. 11	55	18.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	41.7
Bavaria	Nuremburg	106,368	Dec. 4	28	13.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Belgium	Brussels	289,022	Dec. 4	154	19.9	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	3	.....
Do	...do	289,022	Dec. 11	156	20.9	.....	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	4	.....
Do	Antwerp	173,643	Dec. 4	95	28.5	.....	.....	.....	.....	28	11	30	1	.....	.....	2	.....	.....
Do	...do	173,643	Dec. 11	89	30.3	.....	.....	.....	.....	27	6	31	1	.....	.....	2	1	.....
Denmark	Copenhagen	235,254	Dec. 7	95	21.1	.....	.....	.....	.....	.....	.....	15	3	.....	.....	9	1	35.9
Italy	Genoa	185,000	Dec. 18	83	23.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.6
Austria	Trieste	128,233	Oct. 16	76	30.9	.....	.....	.....	.....	.....	2	.....	4	.....	.....	.....	4	.....
Do	...do	128,233	Nov. 28	80	35.4	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	4	.....
Do	Vienna	746,243	Dec. 11	342	21.2	.....	.....	.....	.....	.....	20	.....	8	.....	.....	.....	38	42.0
Roumania	Bucharest	177,646	Dec. 11	94	36.0	.....	.....	.....	.....	.....	3	.....	5	.....	1	.....	6	.....
Hungary	Buda-Pesth	344,604	Dec. 4	197	29.8	.....	.....	.....	.....	.....	9	.....	1	.....	.....	.....	7	.....
Russian Poland	Warsaw	357,163	Dec. 4	133	19.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35.3
Norway	Christiania	116,801	Dec. 4	40	17.8	.....	.....	.....	.....	6	.....	12	.....	.....	.....	6	5	26.4
Portugal	Lisbon	225,152	Nov. 20	155	35.8	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	56.5
Do	Oporto	108,346	Nov. 20	86	41.4	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	56.5
Spain	Cadiz	65,028	Dec. 11	45	36.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.6
Do	Malaga	115,882	Dec. 5	78	35.1	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	.....	58
Do	do	115,882	Dec. 12	77	34.7	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	60
Do	Seville	138,000	Dec. 5	59	22.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	7	53.6
Do	do	138,000	Dec. 12	78	30.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	7	51.8
Barbary	Tripoli	29,000	Dec. 11	10	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66.8
Cape Colony	Cape Town	35,000	Nov. 29	22	32.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
Egypt	Alexandria	220,000	Dec. 11	160	37.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
India	Bombay	644,405	Oct. 19	408	30.3	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	155	82.3
Do	do	644,405	Oct. 26	396	29.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	155	81.2
Do	Calcutta	429,535	Nov. 20	337	40.9	.....	45	.....	.....	.....	.....	.....	18	.....	.....	.....	.....	79.3

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, JANUARY 15, 1881. [No. 29.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-Office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it,* since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

ABSTRACTS FROM CONSULAR REPORTS.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys reports for the month of October 78 deaths in a population of 20,000; annual death rate, 45.8 per 1,000; mean temperature, 84°. The causes of death are not given.

DUBLIN, IRELAND.—For the week ending December 18 the average annual death-rate was 28.6 in sixteen principal town districts of Ireland. The lowest was 6.4 in Dundalk; the highest 40.1, in Cork. The mean death-rate from the zymotic diseases was 5.6 per 1,000, being greatest in Cork. No epidemic disease is reported from any of the districts, but those which are most fatal to children seem to be generally prevalent.

GHENT, BELGIUM.—United States Consul A. Lefebvre reports 6 deaths from typhoid fever and 8 from other contagious diseases during the month of November. The total number of deaths was 264, of which 40 were from consumption, 38 from acute lung diseases, and 44 from diarrhœa. Annual death rate, 24.6.

GUAYMAS, MEXICO.—For the month of November only 6 deaths are reported: two adults died from fever; one child from convulsions and another from unknown cause; one man by suicide, and one from disease not stated. The sanitary condition of the town is good. Mean temperature for the month, 77°.

HOBART TOWN, TASMANIA.—United States Consul A. G. Webster reports 44 deaths during the month of September; population, 27,500; annual death-rate, 19.2 per 1,000. In October there were 48 deaths, with an annual rate of 20.6 per 1,000. No epidemic disease prevailed.

LONDON, ENGLAND.—In the report given by authority of the registrar-general of births and deaths in 23 large cities of the United Kingdom, for the week ending December 18, 5,591 deaths are noted, and 3,261 births. The average annual mortality was 20 per 1,000. In London the rate was 19.6; in Edinburgh, 19; and in Dublin, 26. In twenty of the larger English towns the lowest rate was 13, in Wolverhampton; the highest 26, in Nottingham. In these twenty towns the annual death-rate from the seven principal zymotic diseases averaged 2.6 per 1,000. Small-pox caused 33 deaths in London and 1 in Manchester, but none in the eighteen other cities.

MALAGA, SPAIN.—With the report for the week ending December 19, United States Consul H. C. Marston forwards a copy of a proclamation dated November 30. In this the mayor informs the people that provision has been made for gratuitous vaccination, and urges them to avail themselves of the protection so offered.

MATAMOROS, MEXICO.—During the week ending December 25 there were 13 deaths from small-pox reported, and the number of cases in the town was estimated at 350. The population is 16,000.

MELBOURNE, AUSTRALIA.—For the month of September 439 deaths are reported; population, 265,000, including suburbs. Annual death rate, 20.1 per 1,000. The only causes of death noted are 2 from cholera and 2 from typhoid fever. Consumption is said to be one of the prevailing diseases; and measles are reported, but no deaths from that disease.

NASSAU, NEW PROVIDENCE, WEST INDIES.—Reports for the month of December state that this city is remarkably free from sickness, and is in excellent sanitary condition.

NAVASOTA, TEX.—Under date of January 2, Dr. A. R. Kilpatrick reports that for the two months preceding there had been a great improvement in the health of that place. In November there were still many cases of malarial fever, but no deaths, excepting one infant, a white female, which died of marasmus. The lowest temperature was 20°, the highest was 82°; frost was observed on 5 days, and ice formed on 4 days. Rain fell on 16 days.

In December four deaths occurred: two colored persons, one from consumption, and one from disease of the brain; one white female died in child-birth, and a German, aged 63, from general debility. The lowest temperature was 10°, Fahr., on the 29th, noted as the lowest ever known in December. The highest temperature was 66°. Very little rain fell during the month.

NEW ZEALAND.—The report from the four principal boroughs for the month of October gives a total of 77 deaths. Of these 15 were from consumption; enteric fever, 4; diarrhœa, 2; heart disease, 3; acute lung diseases, 13; puerperal, 2; old age, 1; and 5 by violence or accident. The population of the four boroughs being 75,719, the annual death rate was 12.2 per 1,000. The death-rate for the whole population of 15 boroughs was 20.7 per 1,000.

PARA, BRAZIL.—United States Consul A. C. Prindle reports for the month of October 123 deaths, chiefly from malarial fevers. The population being 40,000, the death rate was 36.4.

PARIS, FRANCE.—The report for the week ending December 23 gives 481 marriages, 1,144 births, and 979 deaths. The population is stated at 1,988,806, which makes the annual death-rate 25.6 per 1,000, while the birth-rate was nearly 30. There were 293 deaths under 5 years, and 95 still-births.

SAMARA, RUSSIA.—The United States consul at Moscow sends the following report of Dr. Bulewsky concerning an epidemic of diphtheria at Samara, a city on the Volga River, about 900 miles from Moscow. Children attacked under one year of age, not fed from the mother, died almost without exception, while sucklings generally recovered. Of those between 1 and 5 years 86 per cent. died. From 5 to 10 years the mortality was 80 per cent. of the cases. The cases among males and females under 5 years were about equal, but between 5 and 20 years more than twice as many females as males were attacked, owing to the confinement of the former in infected houses, and their duties as nurses, while the males were at work in the fields.

SANTANDER, SPAIN.—In this province, having a population of 235,300, the deaths reported for October were 505, giving an annual rate of 25.3 per 1,000. Deaths under 5 years, 213; over 60 years, 132; from diphtheria and croup, 30; whooping-cough, 9; typhus fever, 32; dysentery, 25; puerperal fever, 10; consumption, 41; other lung diseases, 34; diseases of the brain, 12; diarrhœal diseases, 37. The births during the month were 522; annual rate, 26.1 per 1,000.

In November there were 435 deaths; annual rate, 22.5 per 1,000; under 5 years, 138; over 60 years, 129; from measles, 2; scarlet fever, 1; diphtheria and croup, 21; enteric fever, 10; typhus fever, 14; dysentery, 13; diarrhœa, 22; puerperal fever, 7; malarial fevers, 7; consumption, 49; other lung diseases, 48; diseases of the brain, 25. The births were 467; annual rate, 23.7 per 1,000.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 1, 1881.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
Me ..... Portland	34,000	.....	3	2.3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bangor	16,780	.....	1	3.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H ..... Concord	14,000	1	7	25.9	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....
Vt ..... Burlington	11,364	1	7	22.1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass .... Boston	375,000	61	167	23.2	29	11	2	15	2	.....	1	.....	30	5	3	.....	.....	.....	8
Cambridge	52,800	15	29	26.4	3	2	.....	1	.....	.....	.....	.....	7	.....	.....	.....	1	.....	1
Edgartown	1,294	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Bedford	27,286	3	11	21.0	2	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	1
Newburyport	13,800	1	3	33.4	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	4
Marblehead	7,285	.....	4	28.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nantucket	3,726	.....	4	55.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth	7,094	.....	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fall River	49,000	6	15	16.0	4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....
Lowell	59,485	12	28	24.5	3	.....	1	1	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	1
Lawrence	39,000	1	9	12.0	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester	58,295	6	21	18.8	3	.....	1	.....	1	.....	4	.....	4	.....	.....	.....	1	.....	.....
Lynn	38,284	.....	16	21.8	3	.....	.....	2	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Brockton	13,608	2	4	15.0	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holyoke	22,000	3	8	19.0	.....	.....	.....	.....	2	1	.....	.....	2	.....	.....	.....	.....	.....	1
Bridgewater	3,615	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milford	9,310	1	5	28.4	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Chicopee	11,325	2	2	9.6	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fitchburg	12,500	3	5	24.8	1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville	25,000	1	9	18.8	1	.....	.....	1	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Springfield	33,000	2	7	11.1	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
R. I ..... Providence	104,862	8	32	15.9	10	.....	.....	1	1	.....	3	.....	3	.....	1	.....	1	.....	2
Conn .... New Haven	62,682	8	25	20.4	4	.....	3	1	2	1	.....	.....	1	.....	.....	.....	.....	.....	3
New Britain	14,000	1	3	29.6	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Waterbury	20,300	4	10	25.7	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	.....	.....
Fairfield	3,750	.....	2	39.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. Y ..... New York	1,206,507	271	675	28.6	100	26	17	48	3	9	39	.....	130	6	7	6	5	.....	19
Brooklyn	566,689	113	262	24.2	36	16	2	39	.....	1	10	.....	40	.....	3	.....	1	.....	8
Yonkers	19,000	3	8	22.0	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	2	.....	.....
Poughkeepsie	20,200	.....	1	2.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utica	33,923	2	5	7.7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Buffalo	155,159	10	32	10.7	2	.....	.....	1	1	.....	1	.....	5	.....	.....	.....	.....	.....	3
Cambridge	1,850	1	2	58.2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Seneca Falls	6,000	1	4	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tarrytown	3,276	.....	1	15.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J ..... Hudson County	187,950	23	76	21.	10	6	.....	3	2	.....	.....	.....	14	.....	4	.....	.....	.....	2
Newark	138,000	17	43	16.4	6	2	.....	2	.....	1	.....	.....	15	.....	.....	.....	.....	.....	.....
Orange	13,209	.....	7	28.	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Camden	41,704	3	21	26.3	1	.....	3	.....	2	.....	.....	.....	3	.....	.....	3	.....	.....	.....
Plainfield	8,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa ..... Philadelphia	846,980	111	392	24.	58	12	4	6	3	2	14	.....	41	.....	2	53	4	.....	.....
Pittsburgh	156,649	23	66	21.7	7	2	1	1	4	.....	9	.....	8	.....	.....	.....	.....	4	.....
Erie	28,346	1	7	13.0	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Del ..... Wilmington	44,000	14	19	23.3	1	2	.....	.....	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....
Md ..... Baltimore	332,190	75	174	26.3	21	7	3	16	3	2	12	.....	30	.....	.....	.....	3	.....	8
District of Columbia	180,000	30	84	24.3	18	4	1	2	1	1	1	.....	14	.....	.....	.....	.....	.....	3
Va ..... Norfolk	26,200	8	21	42.5	2	.....	.....	3	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	2
Richmond	64,670	15	35	28.5	7	.....	1	.....	.....	.....	.....	.....	5	.....	.....	.....	1	.....	3
Lynchburg	16,500	1	6	19.0	1	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	1
S. C ..... Charleston	57,000	8	33	30.1	6	.....	.....	.....	1	.....	.....	.....	7	.....	.....	.....	.....	.....	2
Ga ..... Augusta	27,012	2	5	9.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atlanta	38,000	6	14	20.0	3	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Rome	5,000	.....	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Brunswick	2,900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla ..... Jacksonville	10,000	1	4	20.9	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Key West	12,000	2	3	13.0	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala ..... Mobile	31,295	1	12	20.0	3	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Selma	7,505	1	4	27.6	1	.....	.....	.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....
Montgomery	17,000	4	10	30.3	.....	1	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	1
Miss ... Columbus	5,300	.....	1	10.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Natchez	7,000	1	3	22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	12,500	1	5	20.9	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La ..... New Orleans	216,359	30	109	26.3	17	3	3	3	1	2	3	.....	10	.....	.....	.....	.....	.....	3
Shreveport	8,033	.....	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Morgan City	2,018	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge	7,187	2	2	14.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Tex ..... Galveston	22,308	4	7	16.4	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ark ..... Little Rock	22,000	2	5	11.9	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Tenn .. Nashville	43,543	8	18	21.2	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Murfreesboro	3,850	1	3	41.4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Memphis	34,000	5	20	30.7	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Shelbyville	1,919	.....	1	27.2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....
Ky ..... Louisville	175,000	16	46	13.7	13	.....	1	.....	2	1	.....	.....	6	.....	.....	.....	.....	.....	1
Ohio ... Cincinnati	280,000	48	119	21.6	21	2	1	2	4	.....	3	.....	28	.....	2	.....	2	.....	1
Cleveland	175,000	.....	46	13.7	5	3	2	2	1	.....	1	.....	5	1	.....	.....	.....	.....	1
Dayton	39,000	1	3	4.1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	1	.....
Gallipolis	11,594	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portsmouth	12,225	2	6	27.7	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Ind ..... Indianapolis	75,350	6	20	13.6	2	.....	1	1	3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Richmond	13,000	2	5	20.6	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Evansville	30,000	4	9	15.7	1	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ill ..... Peoria	34,850	3	10	15.0	1	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	.....	.....	1
Aurora	12,009	1	2	8.7	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rock Island	12,000	3	1	13.0	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville	15,000	1	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Elgin	8,770	2	6	35.6	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Moline	8,200	1	2	13.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 1, 1881—Continued.

CITIES IN WHICH BURIAL PERMITS ARE REQUIRED.

States and cities.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
									Enteric.	Malarial.	Scarlet.	Yellow.							
Wis.....Milwaukee	115,761	26	48	21.5	5	4	.....	1	.....	.....	1	.....	.....	1	1	.....	.....	.....	2
Beloit	5,159	.....	1	10.4	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Mich....East Saginaw	19,065	.....	3	8.2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint	9,000	.....	1	5.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lansing	8,250	2	2	11.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa....Keokuk	12,125	.....	2	8.7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Nebr....Omaha	31,000	5	5	8.6	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Kans....Lawrence	8,500	1	2	12.3	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo....Boulder	3,030	1	1	17.2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Utah....Salt Lake City	25,000	2	8	16.7	1	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	1	1	.....
Cal.....San Francisco	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sacramento	21,500	2	11	26.7	2	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Los Angeles	11,000	3	5	23.9	1	.....	1	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Vallejo	7,000	1	1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Totals	7,013,355	1,076	3,025	22.4	466	111	56	163	45	27	113	.....	477	13	28	62	26	6	91

TABLE OF MORTALITY OF WHITE AND COLORED FOR THE WEEK ENDING JANUARY 1, 1881.

States and cities.	Population.		Number of deaths.		Annual death-rate per 1,000.	
	White.	Colored.	White.	Colored.	White.	Colored.
Mass....Boston	370,000	5,000	166	1	23.4	10.4
R. I.....Providence	101,062	3,800	32	.....	16.5	.....
N. Y.....New York	1,186,144	20,433	666	9	29.0	23.0
Pa.....Philadelphia	815,182	31,798	363	29	23.2	47.6
Del.....Wilmington	38,000	6,000	13	6	14.4	52.2
Md.....Baltimore	278,487	53,723	137	37	25.7	36.0
District of Columbia	120,000	60,000	48	36	20.8	31.2
Va.....Norfolk	14,900	11,300	9	13	33.7	60.0
Richmond	37,971	26,699	10	25	11.1	49.1
S. C.....Charleston	25,000	32,000	7	26	14.6	42.2
Ga.....Augusta	16,182	10,830	2	3	6.4	14.1
Atlanta	22,000	16,000	7	7	16.6	22.9
Brunswick	1,500	1,400	.....	.....	.....	.....
Fla.....Jacksonville	6,000	4,000	3	1	26.1	13.0
Key West	8,000	4,000	3	.....	19.6	.....
Ala.....Mobile	16,927	14,368	6	6	18.5	21.7
Selma	3,425	4,080	1	3	15.2	38.4
Miss....Columbus	2,740	2,560	.....	1	.....	20.3
Natchez	3,500	3,500	1	2	14.9	29.8
La.....New Orleans	159,128	57,231	66	43	21.6	39.3
Shreveport	3,916	4,117	1	1	13.3	12.8
Baton Rouge	2,954	4,233	.....	2	.....	24.6
Tex.....Galveston	17,064	5,244	4	3	12.1	29.8
Tenn....Nashville	27,874	15,669	11	7	20.3	23.1
Memphis	17,293	16,707	7	13	21.1	40.7
Murfreesboro'	2,000	1,850	2	.....	52.2	29.0
Ky.....Louisville	153,125	21,875	34	12	11.6	29.4
Ohio.....Portsmouth	11,225	1,000	5	1	23.2	52.2
Iowa....Keokuk	11,165	960	2	.....	9.3	.....
Kans....Lawrence	6,800	1,700	2	.....	15.3	.....
Totals	3,479,564	442,057	1,608	287	24.0	35.2

The following reports for the week ending January 1, 1881, are from places where burial permits are not required:

Alexandria, Va., 13,000; deaths, 6; under 5 years, 1; consumption 2, pneumonia 1, accident 1. Allegheny, Pa., 78,000; deaths, 16; under 5 years, 1; accident 1, consumption 1, diphtheria 1, pneumonia 4, measles 1. Bath, Me., 8,000; deaths, 3; under 5 years, 1; enteric fever 1, pneumonia 1. Belfast, Me., 5,308; deaths, 2; consumption 1, old age 1. Brattleborough, Vt., 6,000; deaths, 1. Calais, Me., 6,162; deaths, 2; croup 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 4; diphtheria 1. Circleville, Ohio, 6,000; deaths, 2; under 5 years, 2. Clinton, Mich., 1,200; deaths, 2. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,360; deaths, 2; accident 1, pneumonia 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Gunn City, Mo., 150; no deaths. Helena, Mont., 3,630; deaths, 1; diphtheria 1. Hernando, Miss., 1,000; deaths, 2. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; no deaths. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; death, 1. Jefferson, Tex., 3,351; deaths, 2; consumption 1, pneumonia 1. Kenosha, Wis., 5,500; deaths, 4; consumption 2, congestion of lungs 1. La Salle, Ill., 8,885; deaths, 7; under 5 years, 4; lung diseases 3, measles 2, consumption 1, accident 1. Louisiana, Mo., 5,200; deaths, 2; under 5 years, 1; pneumonia 1, measles 1. Madison, Ind., 9,009; deaths, 5; under 5 years, 2; consumption 2, scarlet fever 2. Martinsburg, W. Va., 6,534; no deaths. Milledgeville, Ga., 3,000; death, 1; under 5 years, 1; pneumonia 1. Monmouth, Ill., 6,000; deaths, 3; under 5 years, 3; croup 1, scarlet fever 1. Morton, Miss., 210; no deaths. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,300; deaths, 4; under 5 years, 1; scarlet fever 3. Nebraska City, Nebr., 5,200; deaths, 2; diphtheria 1, pneumonia 1. Niles, Mich., 4,200; death, 1; bronchitis 1. Okolona, Miss., 2,000; deaths, 1; typhoid fever 1. Painesville, Ohio, 5,504; no deaths. Pass Christian, Miss., 4,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; no deaths. Port Gibson, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 23,000; deaths, 8; cerebro spinal meningitis 1, diphtheria 2, pneumonia 2, whooping-cough 1. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 2. Summit, Miss., 1,808; no deaths. Titusville, Pa., 9,000; deaths, 4, consumption 1, typhoid fever 1. Tampa, Fla., 740; no deaths. Tuscaloosa, Ala., 2,000; deaths, 3. Watertown, Wis., 10,000; deaths, 10; under 5 years, 4; accident 1, consumption 1, croup 1, diphtheria 2, pneumonia 1, measles 2, old age 1. Winchester, Va., 5,000; deaths, 3; under 5 years, 2; bronchitis 2, old age 1. Winona, Minn., 10,000; death, 1; under 5 years, 1. Youngstown, Ohio, 15,089; deaths, 3; bronchitis 1, puerperal 1. Total population, 349,779; deaths under 5 years, 30; total number of deaths, 110; annual rate per 1,000, 16.4.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

GAYLORD, KANS.—Under date of January 1, Dr. M. F. Leary reports that diphtheria of very fatal type prevails. During the recent cold weather the temperature fell to 17° below zero; a snow-fall of about two inches is also reported.

HAVANA, CUBA.—During the week ending December 30 there were 4 deaths from yellow fever and 9 from small-pox.

NEW BRIGHTON, RICHMOND COUNTY, N. Y.—Dr. A. L. Carroll, under date of January 1, states that a board of health has been established in the village, which is a suburb of New York. A convenient form of report is furnished to physicians for noting all cases of contagious or infectious disease.

DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

Under date of January 5, the honorable Secretary of State informs the National Board of Health that Mr. William Coppinger, the Liberian consul-general at Washington, has been designated by his government as a delegate to the conference.

SYDNEY, AUSTRALIA.—During the month of October there were 557 deaths and 736 births in the city and suburbs. The rate of infant mortality was very high, being about 64 per cent. of all deaths in the city, and 69 in the suburbs. Measles and whooping-cough contributed largely to this mortality.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880.															
Canada	Montreal	135,000	Dec. 25	55	21.3	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....	7	16.5
Do	Kingston	15,000	Jan. 1	9	29.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	11.3
Cuba	Havana	195,437	Dec. 25	131	35.0	.....	.....	.....	4	.....	7	.....	2	.....	.....	.....	.....	73
Hayti	Cape Haytien	10,000	Nov. 27	6	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	10,000	Dec. 4	5	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	10,000	Dec. 11	6	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	10,000	Dec. 18	8	55.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	10,000	Dec. 25	8	55.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Domingo	San Domingo	8,000	Nov. 21	2	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	...do	8,000	Nov. 28	4	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	...do	8,000	Dec. 5	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	...do	8,000	Dec. 12	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Do	...do	8,000	Dec. 19	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
St. Christopher	Basse-Terre	10,000	Oct. 11	5	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
Do	...do	10,000	Dec. 18	9	47.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
Do	...do	10,000	Oct. 25	4	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Do	...do	10,000	Nov. 1	6	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
Do	...do	10,000	Nov. 8	10	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Do	...do	10,000	Nov. 15	14	83.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	...do	10,000	Nov. 22	10	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	...do	10,000	Nov. 29	9	47.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	...do	10,000	Oct. 4	2	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
West Indies	Turks and Caicos Isl'ds	3,500	Nov. 27	2	29.8	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	...do	3,500	Dec. 4	3	44.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	...do	3,500	Dec. 11	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
Do	...do	3,500	Dec. 18	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	...do	3,500	Dec. 25	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Aspinwall	Colon	2,500	Dec. 25	2	41.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Mexico	Acapulco	3,500	Dec. 4	5	74.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	...do	3,500	Dec. 11	3	44.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	Matamoros	16,000	Dec. 25	22	71.7	.....	.....	.....	.....	350	13	.....	.....	.....	.....	.....	.....	.....
Brazil	Rio de Janeiro	330,000	Dec. 4	177	28.0	.....	.....	.....	4	.....	1	.....	1	.....	.....	.....	5	.....
Do	...do	330,000	Dec. 11	170	26.9	.....	.....	.....	3	.....	1	.....	1	.....	.....	.....	6	.....
Ireland	Belfast	230,000	Dec. 18	138	34.0	.....	.....	.....	.....	.....	.....	22	8	.....	.....	.....	4	41.5
Do	Dublin	314,666	Dec. 18	156	25.8	.....	.....	.....	.....	.....	1	.....	2	.....	4	.....	17	41.5
Scotland	Dundee	155,100	Dec. 18	46	15.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	33.4
England	London	3,664,149	Dec. 18	1,377	19.6	.....	.....	.....	.....	.....	33	.....	6	.....	.....	.....	149	43.3
Do	Tunstall	27,775	Dec. 25	15	26.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.4
Do	Bristol and Clifton	213,500	Dec. 18	106	19.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	43.7
Do	Bradford	197,196	Dec. 18	70	18.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....
France	Rouen	104,209	Dec. 25	53	26.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Paris	1,988,806	Dec. 23	979	25.7	.....	.....	.....	.....	.....	18	.....	27	.....	.....	.....	90	.....
Do	Havre	92,068	Dec. 18	44	24.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.9
Switzerland	Basle	55,000	Dec. 18	18	17.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....
Holland	Amsterdam	316,952	Dec. 18	147	22.6	.....	.....	.....	.....	.....	.....	.....	2	.....	3	.....	4	.....
Germany	Breslau	276,000	Dec. 11	149	28.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	36.8
Do	Brunswick	74,000	Dec. 18	31	21.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	36.5
Do	Hamburg	450,000	Dec. 4	194	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....
Do	Berlin	1,096,644	Dec. 11	501	23.8	.....	.....	.....	.....	.....	.....	32	21	3	.....	119	80	38.7
Do	Bremen	109,000	Dec. 11	45	21.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Cologne	144,225	Dec. 11	87	31.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....
Do	...do	144,225	Dec. 18	79	28.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	.....
Saxony	Dresden	220,216	Dec. 11	90	21.2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	16	16	52.2
Do	Leipsic	150,836	Dec. 18	46	15.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	36.8
Do	Chemnitz	101,115	Dec. 11	33	17.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....
Belgium	Brussels	355,541	Dec. 18	224	21.2	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	6	.....
Denmark	Copenhagen	235,254	Dec. 14	105	23.3	.....	.....	.....	.....	.....	.....	7	1	.....	.....	16	2	36.9
Italy	Rome	304,192	Nov. 20	161	27.5	.....	.....	.....	.....	.....	29	.....	3	.....	.....	.....	11	59.2
Do	...do	304,192	Nov. 27	187	32.0	.....	.....	.....	.....	.....	24	.....	6	.....	.....	.....	16	55.4
Do	...do	304,192	Dec. 4	173	29.6	.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	14	48.6
Austria	Trieste	128,233	Dec. 5	86	35.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	6	.....
Roumania	Bucharest	177,646	Dec. 18	115	36.0	.....	.....	.....	.....	.....	2	.....	7	.....	2	.....	9	.....
Russian Poland	Warsaw	357,169	Dec. 11	190	27.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
Sweden	Stockholm	169,429	Dec. 4	92	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	32.4
Norway	Christiania	116,801	Dec. 11	42	18.7	.....	.....	.....	.....	1	.....	9	4	.....	.....	3	4	34.7
Spain	Malaga	115,882	Dec. 19	68	30.6	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	56
Barbary	Tripoli	20,000	Dec. 18	14	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66.5
Seychelles	Mahé	12,000	Nov. 13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	12,000	Nov. 20	3	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	12,000	Nov. 27	6	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
China	Shanghai	2,197	Nov. 27	3	78.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.5
Japan	Kobe	18,232	Nov. 27	13	37.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

National Board of Health

BULLETIN.

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MONTHLY REVIEW FOR DECEMBER, 1880.

Reports from several large cities having come in too late to appear in the tables of mortality for December, the average population represented for the five weeks ending January 1, 1881, is 393,782 less than that for the month of November. The occasional omission of reports sent in too late for the weekly tables will be corrected in some degree by the annual report of mortality for the year 1880, which will include all cities from which full reports for the year have been received, and in which burial permits are required.

In the tables for this month, the effect of missing reports from large cities is evident in the apparent changes of death-rates, as will be indicated below, in comparing them with those of the preceding month. These omissions in the tables affect the death-rate of the zymotic diseases to a great extent, and as these form the principal part of those selected for the tables, the changes of their death-rates are not to be taken as absolutely correct indications of their relative prevalence in one month as compared with another.

In December the general annual death-rate was 21.81, against 20.46 in November. This increase is to be ascribed in part to the sudden and extreme fall of temperature which occurred in the latter part of the month.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Dec. 4, 1880	7,836,737	3,307	22.00	1,165	7.76	35.23	977	6.50	29.51	494	3.29	14.94	483	3.21	14.57	353	2.35	10.37	230	1.53	6.95
Dec. 11, 1880	7,379,465	2,961	20.93	1,063	7.52	35.90	893	6.31	30.16	451	3.19	15.23	442	3.12	14.93	326	2.40	11.02	221	1.66	7.47
Dec. 18, 1880	8,224,310	3,533	22.41	1,230	7.80	34.81	1,041	6.60	29.46	556	3.53	15.74	485	3.07	13.72	361	2.31	10.30	227	1.44	6.42
Dec. 25, 1880	7,681,472	3,118	21.17	1,098	7.46	35.21	940	6.38	30.14	461	3.13	14.47	479	3.25	15.67	325	2.21	10.42	205	1.39	6.58
Jan. 1, 1881	7,013,555	3,025	22.50	1,076	8.00	35.57	943	7.01	31.17	466	3.46	15.40	477	3.55	15.77	274	2.03	9.06	163	1.21	5.39
Totals	38,135,539	15,944	.....	5,632	.....	.....	4,794	.....	.....	2,428	.....	.....	2,366	.....	.....	1,642	.....	.....	1,046	.....	.....
Means	7,627,108	3,188½	21.81	1,126½	7.70	35.33	958½	6.52	30.08	485½	3.32	15.23	473¼	3.20	14.75	328¾	2.25	10.29	209¼	1.43	6.56

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Dec. 4, 1880	123	0.82	3.52	110	0.73	3.33	71	0.47	2.15	85	0.56	2.57	17	0.11	0.51	24	0.16	0.72	52	0.35	1.57	37
Dec. 11, 1880	105	0.74	3.55	121	0.85	4.09	49	0.35	1.66	64	0.45	2.16	7	0.05	0.23	13	0.09	0.44	41	0.29	1.39	36
Dec. 18, 1880	137	0.87	3.88	120	0.76	3.40	54	0.34	1.53	67	0.42	1.90	9	0.06	0.25	16	0.10	0.45	34	0.22	0.96	44
Dec. 25, 1880	120	0.82	3.84	103	0.70	3.30	40	0.27	1.28	50	0.34	1.60	15	0.10	0.48	14	0.09	0.45	26	0.18	0.83	48
Jan. 1, 1881	111	0.82	3.67	113	0.85	4.08	56	0.42	1.85	45	0.33	1.49	13	0.10	0.43	26	0.19	0.86	27	0.20	0.98	62
Totals	596	.....	.....	567	.....	.....	270	.....	.....	311	.....	.....	61	.....	.....	93	.....	.....	180	.....	.....	227
Means	119¼	0.82	3.73	113¾	0.77	3.55	54	0.37	1.70	62¼	0.42	2.00	12¼	0.08	0.38	18⅔	0.13	0.59	36	0.25	1.13	45⅓

Causes of death.—The remarkable "cold wave" referred to above, and which affected the whole country, has raised the rate of mortality from acute lung diseases from 2.22 to 3.20 per 1,000, or 44 per cent. At the same time consumption shows only an advance of 7 per cent. These two classes of disease must account for the increase in the general death-rate, as the aggregate of the six principal zymotic diseases shows no appreciable change, being 3.08 this month against 3.04 in November. Of these diseases the following show an increased mortality: Scarlet fever, from 0.59 to 0.77, or 31 per cent.; measles are still increasing, but as yet give only a total of 61 deaths; from whooping-cough 93 deaths are reported, but this number is only 26 more than that for November. The following diseases have decreased: Diphtheria, from 1.49 to 1.43, or 4 per cent.; enteric fever, from 0.47 to 0.42, or 11 per cent.; and malarial fevers, from 0.35 to 0.25, or 30 per cent. Croup has shared in the decline of diphtheria, the rate having fallen from 0.87 to 0.82, or 5 per cent. Malarial fevers and diarrhœal diseases show the same rate of decline since last month, each having a death-rate 30 per cent. less than in November. Small-pox is evidently becoming more prevalent, 227 deaths being reported for this month against 115 for the last. The deaths reported for December are distributed as follows: New York City, 18; Camden, N. J., 9; Philadelphia, 189; Chicago, 7; San Francisco, 4. The reasons for omitting this disease in the list of death-rates have been given in previous reviews.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,632,008	10,251	23.08	3,127	7.04	30.50	1,589	3.58	15.50	1,538	3.46	15.00	1,203	2.71	11.74	776	1.75	7.57
Southeast	1,373,949	2,929	22.24	861	6.53	29.41	484	3.67	16.53	377	2.86	12.88	185	1.40	6.31	108	0.82	3.69
Northwest	1,468,171	2,444	17.37	670	2.37	27.41	297	1.05	12.15	373	1.32	15.26	244	0.86	9.98	154	0.54	6.30

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES—Continued.

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	427	0.96	4.17	394	0.89	3.84	138	0.31	1.35	176	0.40	1.71	48	0.11	0.47	56	0.13	0.55	88	0.20	0.86	215
Southeast	77	0.58	2.62	76	0.57	2.59	74	0.56	2.52	58	0.45	1.98	.....	.....	.....	28	0.21	0.96	64	0.49	2.18	.....
Northwest	90	0.32	3.68	95	0.34	3.89	49	0.17	2.00	67	0.24	2.74	7	0.02	0.28	9	0.03	0.37	22	0.08	0.90	7

Distribution of diseases.—In presenting the results of the reports from the three sections into which it has been found convenient to divide the United States, with reference to diseases and mortality, each section will be considered in the order of the tables.

Northeast section.—In this portion of the country the death-rate from consumption and other lung diseases has advanced from 5.85 to 7.04 per 1,000, or 20 per cent. Scarlet fever shows the greatest change, having advanced from 0.63 to 0.89, or 41 per cent. This disease prevails at present chiefly in New York and Pennsylvania; diphtheria still prevails in Brooklyn, in Boston, and in Pittsburgh, Pa., to an extent out of proportion to their population. The increase of measles is also notable in this section, and is observed in the same places where diphtheria prevails. The death-rates of other diseases have remained nearly stationary in this section.

Southeast section.—Here the increased mortality from acute lung diseases is from 1.69 to 2.86 per 1,000. This is explained by the almost unprecedented fall of temperature above mentioned; the deaths from consumption continued at the same time to preserve nearly their former rate. A general increase of diphtheria, scarlet fever, and enteric fever is observed in this section, but it is noted that two of these diseases prevail only as far south as Maryland, the city of Baltimore alone reporting 47 per cent. of the deaths from scarlet fever, and 60 per cent. of those from enteric fever in the southeast section, while the population of the city is but 24 per cent. of that for the whole section. Measles continue to be absent from the list of causes of death in the southeast, and whooping-cough has the low rate of 0.21, which is, however, an increase of 14 per cent. since last month. Malarial fevers still remain highest in this section; but their rate of mortality has fallen from 0.87 to 0.49 under the influence of the cold weather.

Northwest section.—The absence of reports from important cities is chiefly to be observed in this section, and the result is shown in some of the diseases most prevalent in those cities. The decrease of consumption from 1.88 to 1.05, and of acute lung diseases from 1.63 to 1.32 per 1,000, is the fact most worthy of note in this section. Diphtheria also has declined from a rate of 1.37 to 0.54, and croup in similar proportion. Enteric fever, scarlet fever, measles, and whooping-cough show a great reduction of mortality; but this is partly due to the want of reports from places in which those diseases chiefly prevail.

CLIMATE OF PENINSULAR FLORIDA.

[By CHARLES J. KENWORTHY, M. D., Jacksonville, Fla., president of the Florida Medical Association and of the Duval County Medical Society.]

The climatic treatment of pulmonary diseases is a subject of great importance. Professor Reuhle remarks: "In view of the fearful dissemination of consumption throughout all zones, and the enormous percentage of mortality, the importance of checking the spread of this terrible disease, and of diminishing the number of its victims, has never seemed so urgent as at the present time, when there is a growing demand for more attention to the preservation of health, and when the conviction is gaining ground that this is the main feature of medical science. The occurrence of yellow fever in a Southern city, with the consequent loss of a few scores or hundreds of human lives, creates a world-wide sensation, but the great and continuous mortality from phthisis attracts but little attention. In the language of Dr. Jones, of Saint Paul, Minn., "The registrar-general of Great Britain gives about twelve out of every hundred deaths to consumption as a mean rate through a series of years. Of the people inhabiting the globe, 3,000,000 each year die of this disease." Owing to the great annual mortality from phthisis, more especially in certain portions of the United States, and as remedial measures exert but little influence, climate deserves the intelligent investigation and attention of the profession.

Florida is a popular climatic resort for pulmonary invalids, and as ignorance prevails regarding its climatic effects upon diseases and mortality, reliable data should be published. Several writers have asserted that the climate of this State is "moist and sedative," and a recent essayist in a leading medical journal stated that "the atmosphere of Florida is loaded with moisture." If these statements are reliable, a large proportion of pulmonary invalids should shun this State as a climatic resort, and seek some locality where the air is "dry and bracing."

Mentone, on the Mediterranean, possesses an American as well as a European reputation as a sanitarium, and it is recommended because of its temperature, equable climate, and low relative humidity. It is conceded that Minnesota is remarkable for the dryness of its climate. Hence, for the purposes of comparison, we shall give data applicable to these localities as well as to Florida.

Mean relative humidity.

Years.	Minnesota.			Florida.		
	Brekenridge.	Duluth.	Saint Paul.	Jacksonville.	Punta Rassa.	Key West.
	Pr. ct.	Pr. ct.	Pr. ct.	Pr. ct.	Pr. ct.	Pr. ct.
1875	75.7	67.2	69.0	70.3	76.9	71.5
1876	67.7	68.2	69.1	67.2	73.9	76.1
1877	72.2	71.9	67.6	69.3	70.5	74.1
1878	76.2	71.5	67.7	68.7	72.4	74.5
1879	74.1	72.8	65.3	69.7	72.3	74.2
Mean for 5 years for stations	73.2	70.3	67.7	69.0	73.0	74.2
Mean for 5 years for States	70.4			72.1		

From the above data it will be seen that the atmosphere of Peninsular Florida contains but 1.7 per cent. of moisture in excess of that of Minnesota for the entire year. But it is the five cold months which interests invalids, and during this period Peninsular Florida posesses a drier climate than Mentone or Minnesota.

Mean relative humidity.

	November.	December.	January.	February.	March.	Mean for 5 months.	Mean for 5 months for States.
Mentone, Mediterranean*	71.8	74.2	72.0	70.7	73.3	72.4	.....
Breckenridge, Minn	76.9	83.2	76.8	81.8	79.5	79.6	74.3
Duluth, Minn	74.0	72.1	72.7	73.3	71.0	72.6	
Saint Paul, Minn	70.3	73.5	75.2	70.7	67.1	71.3	
Jacksonville, Fla	71.9	69.3	70.2	68.5	63.9	68.8	72.7
Key West, Fla	77.1	78.7	78.9	77.2	72.2	76.8	
Punta Rassa, Fla	72.7	73.2	74.2	73.7	69.9	72.7	

* "The Riviera," by C. J. Sparks, M. D., London. 1879, page 9.

From the above data it will be seen that the mean relative humidity of Mentone exceeds that of Jacksonville by 3.6 per cent. Three stations in Minnesota have a percentage of 1.6 over three stations in East Florida; and Saint Paul shows a percentage of 2.5 above Jacksonville.

To further illustrate the subject of humidity, I will append a table giving the mean relative humidity of Jacksonville for the five cold months for five years.

Mean relative humidity, Jacksonville, Fla.

Years.	November.	December.	January.	February.	March.	Mean for five months.	Normal mean.
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
1875–'76	78.9	71.1	67.8	70.4	69.2	69.7	70.3
1876–'77	68.2	64.5	73.6	69.0	63.5	67.8	67.2
1877–'78	71.8	70.0	67.8	68.5	66.4	68.9	69.3
1878–'79	70.0	66.3	65.0	65.0	66.0	66.5	68.7
1879–'80	70.5	74.6	77.1	69.0	63.7	71.1	69.7
	71.9	69.3	70.3	68.4	63.9	68.8	69.0

In connection with the climatology of Jacksonville, there is one point worthy of notice, and that is the remarkably low percentage of humidity during the much dreaded month of March, the mean for five years being but 63.9, as against 73.3 at Mentone; 79.5 at Breckenridge; 67.1 at Saint Paul; 76.8 at Atlantic City, N. J.; and 68.4 at Nassau, N. P.

As an equable temperature is deemed of great importance in the treatment of pulmonary diseases, we will give the ranges for the five cold months at a few points recommended as winter resorts for invalids.

Comparative temperature for the colder months.

	Years.	November.	December.	January.	February.	March.	Mean for 5 months.
Atlantic City, N. J	4	45	48	48	48	46	47
Minnesota, 3 stations	4	70	63	57	58	58	61
Florida, 3 stations	4	35	37	35	33	35	35
Colorado, 2 stations	4 & 2	68	70	72	58	66	67
Los Angeles, Cal	1	41	44	35	30	35	37

To illustrate the thermal ranges for one year, we shall quote from the work of Dr. Denison, of Colorado, and add the ranges for Peninsular Florida.

	Mean monthly range.	Range of monthly means.	Annual means.	Annual range.
Atlantic City, N. J	41	44.1	49.7	89.5
Denver, Colo	60.5	53.7	49.2	131
Colorado Springs	63.5	47.7	46.8	123
Florida Peninsula	29.7	19.2	73.4	50

Sunshine and an opportunity to take exercise out of doors are all-important elements in the treatment of chronic disease; and as evidence that this State is favored with sunshine and fair weather, and not "cloudy, foggy, and rainy weather," as has been asserted, I will append tables in illustration, given by Dr. Jones, in the New York Medical Journal for September, 1879.

Mean rainfall and number of rainy days at a few sanitaria.

Locality.	Number of years.	November.	December.	January.	February.	March.	Five months.
Nice	28	5.11	4.12	3.06	1.68	2.89	16.86
Mentone	9	5.34	3.15	1.70	2.18	4.13	16.50
Atlantic City, N. J	5	7.61	4.86	4.39	4.27	3.59	24.72
Jacksonville, Fla	5	3.02	3.38	2.34	5.14	2.84	16.62
Key West, Fla	5	2.43	1.38	2.18	2.22	0.94	9.10
Punta Rassa	5	2.38	0.99	1.69	2.67	1.04	8.77

Rainy days (including snow).

Locality.	Years.	November.	December.	January.	February.	March.	Five months.
Jacksonville	5	8.6	7.4	7	8.6	5.8	37.4
Mentone	8	10.1	7.25	5.1	5.66	9.55	37.48
Saint Paul, Minn	1	4	13	8	6	11	42

Meteorological data from signal office, U. S. A., Jacksonville, Fla.

RAINY DAYS.

Date.	November.	December.	January.	February.	March.	Remarks.
1874–1875	14	6	15	10	5	"Rainy days," all days on which rain fell.
1875–1876	10	4	4	8	7	
1876–1877	5	10	6	6	6	
1877–1878	9	9	5	10	8	
1878–1879	5	8	5	9	3	
Average.	8.6	7.4	7	8.6	5.8	37.4 days in 5 months.

Meteorological data from signal office, Jacksonville, Fla.—Continued.

CLOUDY DAYS.

Date.	November.	December.	January.	February.	March.	Remarks.
1874–1875	4	6	12	3	8	
1875–1876	8	4	5	7	2	
1876–1877	6	3	2	10	7	
1877–1878	10	11	11	9	10	
1878–1879	9	11	5	11	4	
Average	7.4	7	7	8	6.2	35.6 cloudy days in 5 mos.

When a day is marked "rainy," but a few drops may have fallen. A measurable or non-measurable quantity may have fallen in a few minutes, and the remainder of the day be bright and clear. In Florida the rains are frequently "torrential," in short, severe, brisk, followed by bright and clear weather.

Temperature is an important factor in the successful treatment of disease, and to illustrate this subject we shall give the temperature for the cold months at a few places recommended as sanitaria:

Mean temperature at several sanitaria.

	Years.	November.	December.	January.	February.	March.	Mean for 5 months.
Cannes, Mediterranean	3	54.6	48.8	48.5	49.4	52.8	50.8
Nice, Mediterranean	3	53.8	48.5	47.0	48.4	51.8	49.9
Mentone, Mediterranean	3	55.2	50.5	48.8	50.4	53.4	51.6
Nassau, N. P	1	75.7	72.3	72.2	71.9	74.4	73.3
Atlantic City, N. J	4	45.3	35.3	32.3	33.2	37.1	36.6
Breckenridge, Minn	5	17.3	13.4	6.8	13.1	18.9	13.9
Duluth, Minn	4	28.8	21.6	12.4	19.2	25.7	21.5
Saint Paul, Minn	5	28.3	20.0	13.0	19.4	27.6	21.7
Key West, Fla	5	74.5	70.5	70.5	71.7	73.8	72.2
Punta Rassa, Fla	5	69.7	64.8	65.5	65.9	69.8	67.1
Jacksonville, Fla	4	62.1	55.8	56.2	56.9	62.7	58.7
Los Angeles, Cal	1	62.1	55.3	54.1	54.6	55.8	56.3

If we consider climatic factors we shall find that Florida presents many attractions and advantages as a climatic resort for invalids. The temperature is favorable; the mean relative humidity is adapted to the treatment of all forms of pulmonary disease; the air is salubrious, and in a large portion of the State airy and bracing; atmospheric changes are infrequent, and sunshine and fine weather the rule. The State possesses insular, inland, dry, and moist localities, semi-tropical and cooler sections, and if the nature of any given case should necessitate a change a suitable climate can be reached in a few hours and at a trifling expense.

A recent writer in a medical journal asserted that the mortality from consumption in this State is very great. With the exception of the city of Jacksonville, registration of deaths is not compulsory, and no data existed upon which such a statement could be based. To ascertain the mortality of this city I addressed our health officer, Dr. Knight, and received the following reply:

HEALTH DEPARTMENT, *City of Jacksonville.*

Dr. C. J. KENWORTHY:

DEAR SIR: A careful examination of the mortuary reports in the city sexton's office reveals the following facts:

Previous to 1878 the records were imperfectly kept and are not reliable.

Mortality for 1878	119
Mortality for 1879	171
Mortality for two years	290
Deduct from this number visitors who died of phthisis, Bright's disease, and organic disease of the heart	40
Total mortality of residents	250

Percentage of mortality per 1,000 among residents for two years, 12.5; percentage of deaths from phthisis among residents, 0.55; percentage of deaths per 1,000 from pulmonary diseases other than consumption, 1.4.

Respectfully yours,

A. W. KNIGHT, M. D.,
Health Officer.

From the published semi-annual mortuary report of this city, we find that the death-rate per 1,000 for the first six months of the present year was 10.6. Deduct from total deaths 37 non-residents who came to the State in the last stages of phthisis and cardiac disease, and the actual mortality among residents was 6.9; mortality from consumption among residents, *none*.

To determine the mortality of this State, more especially from that dreaded disease, consumption, I had a compilation of the census re-

turns made by a reliable and competent person with the following results:

Mortality per 1,000 from all causes, 9.2; deaths per 1,000 from consumption, including invalid visitors who came to the State in the last and incurable stage of this disease, 0.60; deaths per 1,000 from consumption, excluding visitors, 0.44; deaths per 1,000 from pulmonary diseases other than consumption, 0.50; deaths per 1,000 among residents from all pulmonary diseases, 0.94. There was one death from consumption, including visitors, to 15.2 from all causes. There was one death from consumption, among residents, to 18.2 from all causes.

When we take into consideration the habits, food, clothing, exposure, and habitations of a large portion of the residents of this State, coupled with the difficulty of securing medical attendance in outlying districts, and the neglect on the part of many colored people in calling in physicians, it is surprising that the mortality is so low. If pulmonary consumption is so infrequent, it is evident that the climatic factors of this State are favorable to the prevention, alleviation, and cure of that disease.

PROPOSED LEGISLATION ON ADULTERATION OF FOOD.

Mr. H. C. Meyer, of the New York Board of Trade, makes the following report to the National Board of Health:

NEW YORK, *January* 8, 1881.

As chairman of the committee appointed by the National Board of Trade to look after the passage of the inclosed bill, I am requested to send you a copy of the same, together with the memorial to Congress, and to solicit your co-operation in our efforts to secure the passage of a law designed to prevent injurious adulteration without imposing needless restrictions on commerce. I shall be pleased to receive a marked copy of any issue of your paper that contains a reference to the proposed bill.

Very respectfully,

HENRY C. MEYER.

MEMORIAL OF THE NATIONAL BOARD OF TRADE, ACCOMPANYING A BILL FOR THE PREVENTION OF THE ADULTERATION OF FOOD OR DRUGS.

To the honorable the Senate and House of Representatives of the United States in Congress assembled:

Your memorialists respectfully represent that at the annual meeting of the National Board of Trade, held at Washington, December 12, 1879, the following resolution was adopted:

"Whereas the public mind has of late been considerably agitated by the alleged general adulteration of food; and

"Whereas the question of pure and wholesome food and drink is one of great importance to the people of the United States; and

"Whereas local attempts to regulate the sale of food have, on account of limited jurisdiction or other causes, generally proved inadequate for the purposes for which they were designed, and it is therefore important that wise laws (if possible, national in character) should be enacted, which will afford adequate protection both to consumers and honest manufacturers; and

"Whereas a member of this board offers to place $1,000 at the disposal of the executive council of this board for a prize or prizes to be given for the best act or acts, accompanied by an essay designed to prevent injurious adulteration and regulate the sale of food without imposing unnecessary burdens upon commerce: Therefore, be it

"*Resolved*, That the president of the National Board of Trade be authorized to appoint a committee of experts, to be composed of five members, one of whom shall be a member of the medical profession, one a chemist, one a member of the legal profession, and one a merchant; said committee to examine and pass upon the merits of any acts or essays which may be submitted to them and to award prizes therefor. The committee as soon as possible after their appointment to make public the necessary conditions, and when their labors are completed to place in the hands of the president of this board an act designed to accomplish the purpose above described."

The competition instituted by virtue of this resolution ended October 1, 1880. The committee of experts awarded the first prize ($500) to G. W. Wigner, F. C. S., of London, an analytical chemist of high reputation; the second prize ($300) to Vernon M. Davis, of New York; and the third prize ($200) to William H. Newell, M. D., of Jersey City. They also, in accordance with the above resolution, prepared the draft of a national act designed to prevent future deleterious adulterations, which is hereto annexed. The committee who made the award, and who have prepared the accompanying bill, consisted of John S. Billings, M. D., surgeon, U. S. A., vice-president of the National Board of Health; Prof. Charles F. Chandler, president of the New York board of health; the Hon. R. Williamson, ex-chancellor of New Jersey; and A. H. Hardy, esq., of Boston. In the composition of this committee are included the sanitarian, the health-officer, the chemist, the jurist, and the merchant. In the treatment of the subject the advantages of their varied experience and special knowledge have been obvious.

At the annual meeting of the National Board of Trade, held at Washington, December 15, 1880, the following resolutions were unanimously adopted:

"Whereas the National Board of Trade, at its last session, instituted a competition to secure the best essay upon the subject of adulteration of food and drink in the United States, together with drafts of suitable State and national laws designed to prevent injurious adulteration and regulate the sale of food without imposing unnecessary burdens upon commerce; and

"Whereas a committee of experts were appointed to select the best essay and to prepare drafts of acts that, in their judgment, would best secure the objects for which the competition was instituted; and

"Whereas the committee has submitted a report with the drafts of acts referred to: Therefore, be it

"*Resolved*, That the report of the committee of award upon the subject of adulteration of food and drugs, together with the drafts of national and State acts submitted by said committee, are approved by this body.

"*Resolved*, That the president and secretary of this board be directed to transmit to the United States Senate and House of Representatives copies of the report of the committee and of the draft of a national act, requesting in behalf of this body the passage of the same.

"*Resolved*, That the president of this board appoint a committee of three, as the representatives of this body, to promote the proposed national legislation to prevent the adulteration of food and drugs.

"*Resolved*, That the secretary be instructed to transmit copies of the reports and of both drafts of acts to each of the constituent boards, with the request that they will use their influence to secure their enactment.

"*Resolved*, That the thanks of the National Board of Trade are due, and are hereby tendered, to Dr. John S. Billings, surgeon U. S. A., and vice-president of the National Board of Health; Prof. Charles F. Chandler, president of the New York Board of Health; ex-Chancellor B. Williams, of New Jersey, and A. H. Hardy, esq., of Boston, for the valuable services rendered by these gentlemen to this board and to the commercial community."

In accordance with the above resolutions your memorialists pray that the said bill be speedily enacted into law.

FREDERICK FRALEY, *President*.
HAMILTON A. HILL, *Secretary*.

BOSTON, *December* 31, 1880.

A bill to prevent the adulteration of food or drugs.

Be it enacted, &c., That no person or corporation shall knowingly transport, or cause to be transported, from the State, District, or Territory in which he resides or does business, into any other State or territory, or from any foreign country, or other State or Territory, into the State or Territory in which he resides or does business, for sale or barter, or to be offered for sale or barter, any article of food or drugs adulterated within the meaning of this act, and any person violating the above provision shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not more than fifty dollars for each offense.

SEC. 2. That no person shall, within the District of Columbia or in any of the Territories, or in any fort, arsenal, dock-yard, or reservation, or other place under the jurisdiction of the United States, manufacture, offer for sale, or sell any article of food or drugs which is adulterated within the meaning of this act, and any person violating this provision shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding fifty dollars.

SEC. 3. If, on examination of any article of food or drugs imported from any foreign country, it is found to be adulterated within the meaning of this act, a return to that effect shall be made upon the invoice, and articles so noted shall not be permitted to pass the custom-house or be delivered to the consignees, unless on re-examination, as provided for in this act, it shall be found that the said articles are not adulterated.

SEC. 4. The owner or consignee shall have the privilege of calling at his own expense for a re-examination, and on depositing with the collector of customs such sum as he may deem sufficient to defray such expense, it shall be the duty of the collector of customs to procure a certificate, under oath from a public analyst, of a careful analysis of the articles in question; and in case the report by certificate of the analyst shall declare the report of the officer who examined the goods to be erroneous, and the said articles to be unadulterated, the said articles shall be returned to the owner or consignee, and passed without reservation on payment of the duties, if any. But in case the officer's return shall be sustained by the analyst, the said articles shall remain in charge of the collector of customs, to be disposed of in accordance with regulations to be prepared by the National Board of Health and approved by the Secretary of the Treasury: *Provided*, That the owner or consignee, on payment of charges of storage and other expenses necessarily incurred by the United States, and on giving bond, with sureties satisfactory to the

collector, agreeing to remove said articles from the United States, shall have the privilege of re-exporting them at any time within the period of six months after the date of the report of the inspector or public analyst.

SEC. 5. In order to carry into effect the provisions of this act, the Secretary of the Treasury is hereby authorized to appoint from names submitted to him for that purpose by the National Board of Health, one or more suitably qualified persons as special inspectors and as public analysts for adulterated food and drugs at such ports of entry as the Secretary of the Treasury may deem expedient, and it shall be the duty of the National Board of Health to prepare instructions governing the work of such inspectors and analysts, which, when approved by the Secretary of the Treasury, shall govern their action, and that of collectors of customs, in preventing importation from foreign countries of food or drugs adulterated within the meaning of this act.

SEC 6. The National Board of Health shall make, or cause to be made, examination of specimens of food and drugs collected under its direction in various parts of the country, and shall publish in its weekly bulletin the results of such analyses. If it shall appear from such examination that any of the provisions of this act have been violated, the secretary of the board shall at once report the facts to the proper United States district attorney, with a copy of the results of the analyses duly authenticated by the analyst under oath.

SEC. 7. It shall be the duty of every district attorney to whom the Secretary of the National Board of Health or any collector of customs shall report any violation of this act, to cause proper proceedings to be commenced and prosecuted without delay for the fines and penalties in such case provided, unless, upon inquiry and examination, he shall decide that such proceedings cannot probably be sustained, in which case he shall report the facts to the National Board of Health. And for the expenses incurred and services rendered in all such cases, the district attorney shall receive and be paid from the Treasury such sum as the Secretary of the Treasury shall deem just and reasonable, upon the certificate of the judge before whom such cases are tried or disposed.

SEC. 8. An article shall be deemed to be adulterated within the meaning of this act—

a.—In the case of drugs.

1. If, when sold under or by a name recognized in the United States Pharmacopœia, it differs from the standard of strength, quality, or purity laid down therein.

2. If, when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other pharmacopœia or other standard work on materia medica, it differs materially from the standard of strength, quality, or purity laid down in such work.

3. If its strength or purity fall below the professed standard under which it is sold.

b.—In the case of food or drink.

1. If any substance or substances has or have been mixed with it so as to reduce or lower or injuriously affect its quality or strength.

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for the article.

3. If any valuable constituent of the article has been wholly or in part abstracted.

4. If it be an imitation of or be sold under the name of another article.

5. If it consist wholly or in part of a diseased or decomposed, or putrid or rotten, animal or vegetable substance, whether manufactured or not, or in case of milk, if it is the produce of a diseased animal.

6. If it be colored or coated, or polished or powdered, whereby damage is concealed, or it is made to appear better than it really is, or of greater value.

7. If it contain any added poisonous ingredient, or any ingredient which may render such article injurious to the health of a person consuming it: *Provided*, That the National Board of Health may, with the approval of the Secretary of the Treasury, from time to time declare certain articles or preparations to be exempt from the provisions of this act: *And provided further*, That the provisions of this act shall not apply to mixtures or compounds *recognized* as ordinary articles of food, provided that the same are not injurious to health and that the articles are distinctly labeled as a mixture, stating the components of the mixture.

SEC. 9. It shall be the duty of the National Board of Health to prepare and publish from time to time lists of the articles, mixtures, or compounds declared to be exempt from the provisions of this act in accordance with the preceding section. The National Board of Health shall also from time to time fix the limits of variability permissible in any article or compound.

SEC. 10. The term "food" as used in this act shall include every article used for food or drink by man.

The term "drug" as used in this act shall include all medicines for internal or external use.

SEC. 11. All the regulations and declarations of the National Board of Health, made under this act from time to time and promulgated, shall be printed in the Statutes at Large.

SEC. 12. This act shall take effect ninety days after it shall have become a law.

REPORT OF COMMITTEE OF AWARD.

NEW YORK, *October* 27, 1880.

SIR: The committee appointed by the National Board of Trade for the purpose of awarding prizes for the best act or acts, accompanied by an essay, designed to prevent injurious adulteration and to regulate the sale of food without imposing unnecessary burdens upon commerce, have the honor to report as follows:

In accordance with the resolutions under which the committee was constituted, we have carefully examined the papers submitted in this competition, and from these have selected as the three most meritorious essays, with the accompanying acts, numbering them consecutively in the order of merit as follows (first prize, $500; second prize, $300; third prize, $200):

No. 1. The essay and acts having the motto, "*Æquo Animo.*"

No. 2. The essay and acts having the motto, "*Sic utere tuo ut alienum non laedas.*"

No. 3. The essay and acts having the motto, "*Overcome Eril with Good.*"

Upon opening the sealed envelopes, having corresponding mottoes, it is found that the authors of these essays are as follows, viz:

No. 1. Motto "*Æquo Animo,*" G. W. Wigner, F. C. S., London.

No. 2. Motto "*Sic utere tuo ut alienum non laedas,*" Vernon M. Davis, College of City of New York.

No. 3. Motto "*Overcome Eril with Good,*" William H. Newell, M. D., Jersey City Heights, N. J.

In addition to these essays we recommend the printing of the essay having the motto "*Cardinal Cajetan,*" whose author is O. W. Wight, M. D., health officer, Milwaukee, Wis.; and the remarks submitted under the motto "*Work and Wait,*" by Albert B. Prescott, Ann Arbor, Mich.

In connection with this award the following remarks are respectfully submitted:

1. In view of the statements which for the last two or three years have from time to time been made with regard to the prevalence in this country of adulterations of food which are dangerous to health and life, and which have created so much agitation in the public mind as to induce the National Board of Trade to establish this competition, it is very gratifying to find that none of the essayists produce any definite or satisfactory evidence as to the widespread existence of such dangerous adulterations in this country.

The absence of such evidence, in addition to the results recently obtained by several expert chemists in extensive series of analyses of the usual articles of food in this country, which results have been made known to the committee, fully warrants us in declaring that none of our staple articles of food or drink are so commonly adulterated as to be dangerous to health or life. Such dangerous adulterations appear to be mainly in the form of poisonous colors or coloring matters, as, for instance, in confectionery, and even these are rare.

2. The question of the adulteration of food, with perhaps the exception of milk, should therefore be considered not so much from a sanitary standpoint as from that of commercial interests; as being of the nature of a fraud in aiding the sale of articles which are not what they are represented to be. The main objects of legislation upon this subject should be to prevent deception, to furnish to the public authoritative information, and to nullify the operations of ignorant and sensational alarmists, who damage the business interests of the country quite as much as do the evils of which they complain.

3. We are of the opinion that there is much more danger to health and life in this country from adulterated drugs than there is from adulterated food, and that any legislation which is to deal with the one should also deal with the other.

4. To indicate the legislation upon the adulteration of food and drugs, which will protect health and prevent fraud, and at the same time not impose unnecessary burdens upon trade, is a matter of very great difficulty, as the result of this competition clearly shows, for we do not consider any of the acts proposed to be satisfactory. In this matter it is much better at first to do too little than too much, and the first steps in such legislation should be tentative and educational in character.

5. While it is highly desirable that the general principles of legislation on this subject should be the same in all States, we do not think it possible to secure by State laws absolute uniformity in the details in all parts of this country, and it would therefore be unwise to make the attempt.

6. We do not think that any law upon the adulteration of food and drugs can be made efficient without a properly-constituted health authority to supervise its execution. The questions involved are in a high degree technical, and require special training in those charged with administering the law. At the same time we think that the existence of such health authorities should be taken for granted in the acts, and that these should not attempt to create them.

We believe that every State should have a board of health, but that such boards should be created by independent legislation.

7. We think it unadvisable that the law should attempt to define in detail as to what an adulteration is. A very considerable amount of discretion should be left to the Board of Health in this respect, limiting it only in the direction of possible over-rigidity.

Many well-recognized articles of commerce, although harmless and even useful, may be said to be adulterated, and it should be left to the discretion of the board to exempt any article from the penalties imposed in the act.

8. Care should be taken not to make the penalties excessive. It should be remembered that mere exposure of fraudulent practices, if effectually and persistently made, is in itself a penalty, and as a rule public opinion may be trusted to make such practices unprofitable if measures be taken to make this opinion a correct one, which we think should be the great object of the law proposed.

Under no circumstances should fees or moieties to informers be allowed.

9. We think that both State and national laws upon this subject are desirable. The State law should deal with the subject in the individual State. The national law should deal with adulterated articles coming from foreign countries, or passing from one State into another, and also with adulterations in the Territories, the District of Columbia, and in all places under the special jurisdiction of the United States. It is, of course, in the highest degree desirable that the State and United States legislation on this subject should not be discordant.

The educational feature should be even more prominent in the national than in the State law, while the punitive feature should, if anything, be less severe. As the State laws will vary somewhat in this last respect, it follows that the penalties in the United States law should be at a minimum.

10. The committee will endeavor to prepare and to place in the hands of the president of the National Board of Trade as soon as possible drafts of acts, prepared in accordance with the general principles contained in this report.

All of which is respectfully submitted.

JOHN S. BILLINGS,
B. WILLIAMSON,
C. F. CHANDLER,
A. H. HARDY,
Committee of Award.

THE ORIGIN AND GROWTH OF THE QUARANTINE SYSTEMS OF THE UNITED STATES.

NATIONAL LEGISLATION—Continued.

[By STEPHEN SMITH, A. M., M. D., of New York.]

In a preceding article the fact was stated that a motion was made in the First Congress, which sat in New York, looking to the establishment of health offices in the several ports of the Union, but that the exact purport of the motion was not known. The following were the proceedings, as given in the Journal of Congress:

"*Thursday, December* 16, 1790.

"A petition of the merchants and other inhabitants of Baltimore was presented to the House and read, praying that a health office may be established, or other provision made by law, for protecting them from infectious and epidemical diseases brought by passengers and others arriving from foreign countries.

"*Friday, December* 17, 1790.

"*Ordered*, That the petition of the merchants and other inhabitants of the town of Baltimore, which was presented yesterday, be referrred to Mr. Seney, Mr. Vining, and Mr. Parker; that they do examine the matter thereof and report the same, with their opinion thereupon, to the House.

"*Tuesday, December* 21, 1790.

"Mr. Seney, from the committee to whom was referred the memorial of sundry inhabitants of the town of Baltimore, praying the establishment of a health office, made a report, which was twice read and agreed to by the House, as followeth:

"Your committee have had under their consideration the subject-matter of the said memorial, and are firmly persuaded that the same highly merits the attention of Congress. But being convinced that the regulation prayed by the memorialists is not only essential for the port aforesaid but for all others into which considerable imports are made, are of opinion that a law ought to be passed with general provisions in this respect.

"*Ordered*, That a bill or bills be brought in pursuant to the said report, and that Mr. Lawrence, of New York, Mr. Seney, of Maryland, Mr. Stoutenburgh, of Virginia, Vining, of Delaware, and Goodhue, of Massachusetts, be such committee."

There is no evidence that this committee reported, but the inference is that the petitioners contemplated the establishment of quarantines under national regulations and supervision, and that the project received the sanction of the first committee appointed to consider the petition.

The action of Congress in regard to the port of Baltimore is as follows:

"AN ACT declaring the consent of Congress to an act of the State of Maryland, which passed December 28, 1789, and approved June 9, 1794.

Be it enacted, &c., That the consent of Congress be, and is hereby, granted and declared to the operation of an act of the general assembly of Maryland, passed the 28th of December, one thousand seven hundred and ninety-three, entitled "An act to appoint a health officer for the port of Baltimore, in Baltimore County," so far as to enable the State to collect a duty of one cent per ton on all vessels coming into the district of Baltimore from a foreign voyage, for the purpose of the said act intended.

SEC. 2. *And be it further enacted*, That this act shall continue in force to the end of the next session of Congress, and no longer.

This act was repeated.

Yellow fever prevailed in the principal commercial centers during the years 1802, 1803, 1804, and 1805, but not with the fatality that it exhibited in 1798. During this period the discussion in regard to the importation and contagiousness of the fever was very exciting, and was participated in by the leading physicians of the time. Dr. Benjamin Rush, of Philadelphia, led the advocates of the local origin and non-contagiousness of the fever, and Dr. David Hosack, of New York, headed the opposition. The former class had the larger number of followers and exerted the greatest popular influence. The opinion became very general that yellow fever depended upon local filth, and that it was not propagated by any infectious or contagious properties. In the light of these opinions, quarantine rules and regulations were not only useless, but were unjustifiable restraints upon commerce and travel. Dr. Rush said of quarantines: "They originated in error; millions of money have been wasted by them; thousands of lives have been sacrificed by them." Potter, an equally zealous opponent of quarantines, asserted that he "anticipated the era when our government would make it a national concern; when a consular convention at least with the nations commercially connected with us, will put a period to a system which is a reflection upon our philosophical character."

Dr. Hosack, on the contrary, not only strongly advocated quarantines, but took high ground in favor of placing them under the management of the general government.

The opinions of Rush found a supporter in Mr. Jefferson, as appears from the following card written in 1807 and his annual message of 1805. The card is dated at Monticello, September 8, 1807, and was written to Mr. Crawford. It is as follows: "Thomas Jefferson presents his compliments to Mr. Crawford, and his thanks for his Observations on Quarantines, which he has read with great pleasure. Not himself a friend to quarantines, nor having confidence in their efficacy, even if they are necessary, he sees with pleasure every effort to lessen their credit. But the theory which derives all infection and ascribes to unseen animals the effects hitherto believed to be produced by it, is, as yet, too new and unreceived to justify the public servants in resting thereon the public health, until time and further investigation shall have sanctioned it by a more general confidence."

In his annual message dated December 2, 1805, President Jefferson says:

"In taking a view of the state of our country, we, in the first place, notice the late affliction of two of our cities under the fatal fever which, in latter times, has occasionally visited our shores. Providence, in his goodness, gave it an early termination on this occasion, and lessened the number of its victims which have usually fallen before it. In the course of the several visitations of this disease, it has appeared that it is strictly local, incident to cities and on the tide-waters only, incommunicable in the country either by persons under the disease or by goods carried from diseased places; that its access is with the autumn and it disappears with the early frosts. These restrictions within narrow limits of time and space give security even to our maritime cities during three-fourths of the year, and to the country always. Although from these facts it appears unnecessary, yet, to satisfy the fears of foreign nations, and cautions on their part, not to be complained of in a danger whose limits are unknown to them, I have strictly enjoined on the officers at the head of the customs to certify with exact truth for every vessel sailing for a foreign port the state of health respecting this fever which prevails at the place from which she sails. Under every motive from character and duty to certify the truth, I have no doubt they have faithfully executed this injunction. Much real injury has, however, been sustained from a propensity to identify with this endemic, and to call by the same name fevers of very different kind, and which have been known at all times and in all countries, and never have been placed among those deemed contagious. As we advance in our knowledge of this disease, as facts develop the sources from which individuals receive it, the State authorities charged with the care of the public health, and Congress with that of the general commerce, will become able to regulate with effect their respective functions in those departments. The burdens of quarantine are felt at home as well as abroad; their efficacy merits examination. Although the health laws of the States should be found to need no present revisal by Congress, yet, commerce claims that their attention be ever awake to them."

In 1805 the city of Alexandria again petitioned Congress to provide an adequate quarantine for the District, as follows:

To the honorable the Senate and House of Representatives of the United States in Congress assembled, the memorial and petition of the common council of Alexandria respectfully shows:

That ever since the town of Alexandria became subject to the

exclusive jurisdiction of Congress they have incurred very heavy expenses in supporting a quarantine establishment, and that application has been made to the proper department of the general government for aid that has been extended by Congress to other seaport towns, and they have received for answer that the provisions of the act of Congress could not be extended to the town of Alexandria, without legislative sanction, that act referring only to State laws, and not to the ordinances of a corporation; and also that, even waiving that question, the appropriations made to carry that act into effect had been exhausted; that the quarantine ground at Jones's Point (now the property of the United States) is well calculated for an establishment extending its protection to the city of Washington and Georgetown; that the finances of this town are altogether incompetent to carry into effect such regulations, concerning quarantine, as the importance of the measure, the safety of the inhabitants, and the due accommodation of the persons and property subjected to quarantine urgently require; that it is essential to all these objects that the provisions of the third section of the act passed on the 25th of February, 1799, entitled "An act respecting quarantine and health laws," should be extended, so as to give the same aid to the execution of the health laws of this District, as is by the same section provided for the health laws of the States; that, in addition to the warehouses and wharves, which are directed by that law to be built for the reception of goods and merchandise, humanity requires that there should be some necessary buildings for the accommodation of sick and disabled seamen and others, for the time they may be subjected to quarantine.

We finally pray, on behalf of our constituents, that Congress will pass a law for a general quarantine establishment, to be maintained at the expense of the United States; as one establishment at Jones's Point, below Alexandria, suffices for the whole District, and the expense attending the maintenance of it on a respectable footing is a grievous burden to the good people of this town.

Signed on behalf and by order of the common council of Alexandria this 27th day of December, 1805.

This communication was submitted to the Secretary of the Treasury by the chairman of the Committee on Commerce and Manufactures. The Secretary was the Hon. Albert Gallatin, who replied as follows:

TREASURY DEPARTMENT,
February 15, 1806.

SIR: The memorial from Alexandria seems to contemplate three objects: 1st, the erection of stores for a quarantine establishment; 2d, the support of the establishment itself, including the compensation of the health officer; 3d, the erection of a building for sick seamen.

As it relates to the last object, the collector of Alexandria is already authorized to expend the whole amount received from seamen in the District of Columbia. The erection and support of a regular hospital would be much more expensive than the funds will allow; and as there are as yet but three such establishments, at Boston, Norfolk, and Charleston (the last of which is authorized, but not erected), the application, considering the relative importance of other ports not yet provided for, seems rather premature.

On the second point I will only observe that the compensation of the health officer, and other expenses necessary to carry health laws into effect, are in every instance defrayed by the proper State or city, those which relate to the storage of goods only excepted; and in relation to these, the price paid for storage defrays all the current expenses; so that the erection of stores and wharves is the only expense which has ever been incurred by the United States. Whether the peculiar situation of the District of Columbia renders an exception proper seems to be a matter altogether of legislative discretion.

On the first point, viz, the propriety of erecting the necessary stores, I can only observe that the only places where that expense has heretofore been incurred are New York, Philadelphia, Baltimore, and Charleston; and if the committee shall think it expedient to comply with the application from Alexandria in that respect, I beg leave respectfully to suggest the propriety of embracing, by an appropriation sufficient for that purpose, such other ports of greater importance and similar situation as have not yet been provided for.

I have the honor to be, very respectfully, sir, your obedient servant,

ALBERT GALLATIN.

HON. JACOB CROWNINSHIELD,
Chairman of the Committee on Commerce and Manufactures.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BURLINGTON, VT.—Dr. George M. Ockford, under date of January 10, states that diarrhœal diseases had prevailed during the month of December, but had lately abated. A fatal case of malignant pustule had occurred, of which the cause was not known. The person attacked was a young man of good habits and previous good health. In his business he used a great deal of a French copying ink, and Dr. Ockford thinks there may be a possible connection between the use of this ink and the disease.

JACKSONVILLE, FLA.—Health Officer A. W. Knight, under date of January 15, observes that the population of Jacksonville, as reported in the last census, having been taken in summer, is not a proper basis for reports of mortality. At least 2,000 persons are added during the colder months, and in future reports allowance will be made for this increase.

Dr. Stephen Smith, member of the National Board of Health, forwards the following extracts from a letter written by Dr. Glazier, who died of yellow fever last month at Key West:

KEY WEST, FLA.—The late Dr. W. C. W. Glazier, who died of yellow fever on the 12th of December, while in charge of the Marine Hospital at that place, wrote on the 7th of December as follows: "There have been no cases of dengue, reported as such, in this place, excepting that the first case of yellow fever officially reported was said to have 'degenerated from a mild form of dengue.' In my conversations with physicians who have had a considerable practice in the city I have learned nothing of the peculiar pains or eruption of that disease. * * * It is very difficult to arrive at any conclusion in regard to the sickness here this summer. The physician who treated the most cases—between 160 and 200—called the first case 'congestive fever' in the burial certificate. I believe his first cases occurred in July. After the official report of the above case of 'degenerated dengue' he remembered that all his cases were cases of yellow fever. I have received a note from another physician, who had a large number of cases—between 60 and 100—and he says that he has not seen a case of dengue. Another told me a few evenings ago that he had not seen a case of dengue, although he had treated over 60 cases of fever. I have had no cases in the city, but I have seen a few well-pronounced cases of yellow fever in the practice of other physicians. All that I saw that had albuminuria died. In none was there the pain in the limbs or the eruption. I visited Havana recently expressly to see yellow fever where there could be no doubt as to its identity. I saw cases in charity, military, and other hospitals, and they were to all appearances identical with those I saw here."

The following reports for the week ending January 8, 1881, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; under 5 years, 1; consumption 2, diarrhœa 1. Allegheny, Pa., 78,000; deaths, 29; under 5 years, 12; consumption 3, diphtheria 1, typhoid fever 3, pneumonia 1, bronchitis 2. Bath, Me., 8,000; deaths, 5; consumption 1, erysipelas 1, pneumonia 1. Belfast, Me., 5,308; deaths, 4; pneumonia 1, pleurisy 1. Bowling Green, Ky., 6,000; deaths, 3; accident 1. Brattleborough, Vt., 6,000; deaths, 4. Calais, Me., 6,162; deaths, 4; under 5 years, 1; consumption 1. Carrollton, Miss., 600; death, 1. Chillicothe, Ohio, 11,000; deaths, 3; under 5 years, 1; accident 1, diphtheria 1. Circleville, Ohio, 6,000; deaths, 2; consumption 1, bronchitis 1. Corinth, Miss., 2,264; death, 1; bronchitis 1. Dallas, Tex., 10,630; deaths, 3; under 5 years, 1; consumption 1, diarrhœa 1. Decatur, Miss., 1,000; death, 1; under 5 years, 1; whooping-cough 1. Fayette, Miss., 400; death, 1; under 5 years, 1. Gunn City, Mo., 125; no deaths. Helena, Mont., 3,630; no deaths. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; deaths, 2. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,351; deaths, 3; under 5 years, 1; consumption 1, bronchitis 1, puerperal 1. Kenosha, Wis., 5,500; death, 1. La Salle, Ill., 8,885; deaths, 5; under 5 years, 4; scarlet fever 1, bronchitis 1, consumption 3. Louisiana, Mo., 5,200; deaths, 2; under 5 years, 1; pneumonia 1, measles 1. Madison, Ind., 9,009; deaths, 5; under 5 years, 1; consumption 1, erysipelas 1, puerperal 1. Marquette, Mich., 5,000; no deaths. Martinsburg, W. Va., 6,381; deaths, 2; pneumonia 1. Milan, Tenn., 1,800; deaths, 3, pneumonia 1, puerperal 1. Milledgeville, Ga., 3,000; no deaths. Monmouth, Ill., 6,000; death, 1; puerperal 1. Morton, Miss., 210; no deaths. Mount Pleasant, Iowa, 4,500; death, 1; old age. Muscatine, Iowa, 8,412; deaths, 5; under 5 years, 1; scarlet fever 2. Muskegon, Mich., 11,300; death, 1; diphtheria 1. Niles, Mich., 4,200; no deaths. Painesville, Ohio, 5,504; deaths, 2; under 5 years, 1; croup 1. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 3; under 5 years, 1; pneumonia 1. Plymouth, Mich., 3,000; death, 1; consumption 1. Port Gibson, Miss., 1,200; death, 1; under 5 years. Port Royal, S. C., 750; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; no deaths. Rockland, Me., 7,500; deaths, 2; pneumonia 1. Santa Cruz, Cal., 5,000; no deaths. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 6; under 5 years, 4. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 3; under 5 years, 1; croup 2. Tuscaloosa, Ala., 2,000; deaths, 4; consumption 1, old age 2. Watertown, Wis., 10,000; deaths, 3; under 5 years, 1; pneumonia 1, old age 1. Winchester, Va., 5,000; deaths, 4; under 5 years, 1; pneumonia 1, old age 2. Winona, Minn., 10,000; deaths, 2; under 5 years, 1; congestion of lungs 1. Youngstown, Ohio, 15,089; deaths, 6; under 5 years, 1; consumption 1, congestion of lungs 1. Total population, 342,113; deaths under 5 years, 53; total number of deaths, 133; annual rate per 1,000, 20.2.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 8, 1881.

State.	Cities.	Total population.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	34,000	9	13.8			9						3								1	
	Bangor	16,780	6	18.4			6						1									
N. H	Concord	14,000	5	18.5			5						1				1				1	
Vt	Burlington	11,364	4	12.6	11,248	116	4		12.5		1,285		1		40.9							
Mass	Boston	375,000	206	28.7	370,000	5,000	203	3	28.6	43.3			90	2			4				36	1
	Edgartown	1,294																				
	New Bedford	27,286	15	28.7			12	3					1	1							3	
	Newburyport	13,800	6	22.3			6						4						1			
	Marblehead	7,285	3	21.0	7,269	16	3		21.0				1									
	Nantucket	3,726	1	13.8			1														1	
	Plymouth	7,094	2	14.7			2															
	Fall River	48,626	14	14.9									5								2	
	Lowell	59,485	24	21.0			24						10								4	
	Lawrence	39,000	12	16.4			12						2						1		2	
	Pittsfield	13,367	3	12.5			3										1					
	Worcester	58,259	20	17.9									6				1				3	
	Lynn	38,284	17	23.2			17						5								1	
	Brockton	13,608	3	11.5									1									
	Holyoke	22,000	4	9.5			4						3						1			
	Bridgewater	3,615	1	14.3	3,600	15	1		14.3													
	Milford	9,310	1	5.7			1															
	Chicopee	11,325	1	4.8			1						1									
	Fitchburgh	12,500	5	20.7			5						3								2	
	Somerville	25,000	12	25.0			12						5								1	
	Springfield	33,000	10	15.8									1								1	
R. I	Providence	104,852	40	20.0	101,052	3,800	39	1	20.1	13.7			8	1							6	
Conn	New Haven	62,882	25	20.4			23	2					7	1							4	1
	New Britain	14,000	2	7.4																		
	Fairfield	3,750			3,500	250																
N. Y	New York	1,206,507	778	33.0	1,186,144	20,433	769	9	33.8	23.0			313				42		5		122	3
	Brooklyn	866,689	332	30.7			323	9					138	4			13				35	1
	Yonkers	19,000	8	22.0			8						2								3	
	Poughkeepsie	20,200	5	13.0			5						2									
	Utica	33,923	12	18.4			12															
	Buffalo	155,159	33	11.1			30	3					9								1	
	Watertown	10,666	6	29.3			6														2	
	Cambridge	1,850			1,800	50																
	Seneca Falls	6,000	1	8.7			1															
N. J	Hudson County	187,950	87	24.2									35				2				9	
	Newark	138,000	75	28.8			71	4					35				1		1		10	
	Orange	13,209	8	32.1			8						4				1		1			
	Camden	41,714	9	11.3			8	1					2								1	1
	Plainfield	8,126	2	13.0			2						2				1					
Pa	Philadelphia	846,980	391	24.1	815,182	31,798	365	26	23.4	42.7			126				7		2		52	3
	Pittsburgh	156,649	62	20.3			60	2					28				1				6	
	Erie	28,346	9	16.7			9						3						1		2	
D. C		180,000	78	22.5	120,000	60,000	45	33	19.5	28.6			12	13			1	1			9	5
Va	Norfolk	26,200	14	28.3	14,900	11,300	5	9	18.7	41.6				3							2	
	Richmond	65,000	38	30.8	38,000	26,800	17	21	18.9	41.2			3	7			1			1	2	4
	Lynchburg	16,500	8	25.3			6	2					3	2							2	
S. C	Charleston	57,000	35	31.9	25,000	32,000	11	24	22.9	39.0			3	7							1	4
Ga	Augusta	27,012	10	19.4	16,812	10,830	1	9	3.2	43.2				4								1
	Atlanta	38,000	18	24.4	22,000	16,000	8	10	19.0	32.7				5								
	Rome	5,000	1	10.4				1														
	Brunswick	2,900	1	18.0	1,500	1,400		1		37.3												
Fla	Jacksonville	8,000	5	26.1	5,000	3,000	3	2	26.1	26.1				1					1		1	
	Key West	12,000	5	21.7	8,000	4,000	4	1	26.1	13.0			2						1		1	1
Ala	Mobile	31,295	33	55.1	16,927	14,368	14	19	43.1	69.0			1	8					2	1	5	1
Miss	Columbus	5,230	3	30.0	2,740	2,560	2	1	39.1	20.3			1									1
	Vicksburg	12,500	9	37.6			5	4					1	2								
La	New Orleans	216,359	129	27.2	159,128	57,231	88	41	25.2	32.8			15	10							17	7
	Shreveport	8,033	5	32.6	3,916	4,117	1	4	13.3	51.3			1	2					1			1
	Baton Rouge	7,187	4	29.0	2,954	4,233	2	2	35.3	24.6				1								
Tex	Galveston	22,308	14	32.7	17,064	5,244	10	4	30.2	39.8	7								1			
Ark	Little Rock	22,000	5	11.9			2	3						1							1	
Tenn	Nashville	43,543	16	18.9	27,874	15,669	7	9	12.8	29.7			3	2							1	
	Clarksville	7,250			4,000	3,250																
	Murfreesboro	3,850	2	27.6	2,000	1,850		2		58.0				1								
	Memphis	34,000	22	33.8	17,293	16,707	13	9	39.2	28.1				2					1			1
Ky	Louisville	175,000	55	16.4	153,125	21,875	35	20	11.9	49.1			10	8					1	1	5	4
Ohio	Cincinnati	280,000	109	20.3			104	5					27				5	1			14	1
	Cleveland	175,000	66	19.7													1				4	
	Gallipolis	4,500	1	11.6			1						1									
	Dayton	39,000	10	13.4			10						5								2	
	Portsmouth	12,225	4	18.4	11,125	1,000	4		18.6		1,415	125	1		75.3							
Ind	Indianapolis	75,350	18	12.3			16	2					5				3		1		1	1
	Jeffersonville	10,000	2	10.8			2						1								1	
	Richmond	13,000	2	8.2	12,400	600	1	1	4.2	86.9			1									1
	Evansville	30,000	12	20.9			11	1					2				1				2	
Ill	Peoria	34,850	12	17.6	34,500	350	12		17.5				6				2					
	Aurora	12,009	5	21.7			5						1								1	
	Moline	8,200	3	19.6	8,000	200	3		19.6				2								1	
	Jacksonville	15,000	1	3.5				1						1			1					
	Elgin	8,770	5	24.7			5						1								2	
	Rock Island	12,000	3	13.0			3															
Wis	Milwaukee	115,761	47	21.7									28				1				1	
	Beloit	5,150	1	10.4	5,000	150	1		10.4				1									
Mich	East Saginaw	19,065	7	19.2			7						7						1			
	Flint	9,000	1	5.8			1						1				1				1	
	Lansing	8,500	4	23.0			4															
Iowa	Keokuk	12,125	5	21.7	11,165	960	5		23.4				1								1	
	Dubuque	28,000	7	12.9			7						2								1	
Mo	Saint Louis	350,522	141	21.0			117	24					42	5			4		1	1	18	5
Nebr	Omaha	31,000	4	6.9			4						3									
Colo	Boulder	3,030																				
Utah	Salt Lake City	25,000	6	12.5			6						2									
Cal	Sacramento	21,500	7	17.0			7						2				1				1	
	Los Angeles	11,000	3	14.4			3						1						1			
	Vallejo	7,000	3	22.3							750											
	Total	7,258,184	3,265	23.5	3,237,788	377,122	1,780	261	26.6	36.1	3,457	125	1,056	94	17.0	13.0	99	7	20	4	493	8

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 8, 1881.

State.	Cities.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
		W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland			1												1										1					
	Bangor	1				1										1															
N. H	Concord															2															
Vt	Burlington																														
Mass	Boston	6		2		24				5		1				18			1	16		2		7		1				1	
	Edgartown																														
	New Bedford					1								1		1	1														
	Newburyport	1						1										1													
	Marblehead					2										1															
	Nantucket																														
	Plymouth									1										1											
	Fall River									1																1					
	Lowell									1				1		2				1				1		1					
	Lawrence									1																				1	
	Pittsfield															2															
	Worcester					2								5		2														1	
	Lynn									1						3															
	Brockton																														
	Holyoke							1								1															
	Bridgewater																														
	Milford																														
	Chicopee															1															
	Fitchburgh					3																									
	Somerville	1				1										1															
	Springfield									2						4															
R. I	Providence	1		1						3				2		4	1	1		3											
Conn	New Haven	1		2		1	1	1						1		1		1													
	New Britain	1																													
	Fairfield																														
N. Y	New York	26		5		68		5		1		5		39		81	1			40				2		16		6	1		
	Brooklyn	22		1		41				1		4		11		43	3	1		12	1	2		3		7					
	Yonkers	1														1										1					
	Poughkeepsie																														
	Utica																														
	Buffalo					3		1				1		3		3				3						1					
	Watertown			1												1															
	Cambridge																														
	Seneca Falls																														
N. J	Hudson County	3				3				2		2		1		7		2		4						6					
	Newark	6		1		7				1		1		2		6		2		3		1									
	Orange					2										1															
	Camden									1											1							2			
	Plainfield					1																									
Pa	Philadelphia	11		4		8		3		6				11	1	21	1	7		8	2		1					52	3	1	
	Pittsburgh	2		1		4				2		1		9		2		1		1						1				1	
	Erie															3															
D. C					1	5				1				3		1	4	1	1		3				1	1	2				
Va	Norfolk			1	1		1										1		1												
	Richmond	1		1		1											2	1						1		1				1	1
	Lynchburg				1	1		1												1											
S. C	Charleston				1	1	1										2	1	1												
Ga	Augusta		2		1		1									1	1				1										
	Atlanta															3	5														
	Rome																														
	Brunswick																														
Fla	Jacksonville				1																										
	Key West	1																								1					
Ala	Mobile		1	1	1											3	5														
Miss	Columbus										1																			1	
	Vicksburg																														
La	New Orleans	2	1	8	1	3	1			3				5		5	7			2		1									
	Shreveport				1																										
	Baton Rouge									1									1												
Tex	Galveston	1	1	1												2	1	1						1							
Ark	Little Rock		1						1								1														
Tenn	Nashville				1	1										1	2														
	Clarksville																														
	Murfreesboro																														
	Memphis		1	3												2	1									1					
Ky	Louisville															6	3				1					1					1
Ohio	Cincinnati	1		1		3		1		1						16	1			5	1					2				2	
	Cleveland	5		2		6		1		2								10		2											
	Gallipolis																			1											
	Dayton	1								1										1											
	Portsmouth											1								2				1							
Ind	Indianapolis															1	1			1											
	Jeffersonville																														
	Richmond													1																	
	Evansville					1				1						1	1														
Ill	Peoria	1		1		1						1		1		2															
	Aurora					1														1											
	Moline																														
	Jacksonville																				1										
	Elgin									1						1		1													
	Rock Island											1								1											
Wis	Milwaukee					4								5		4		3		1				1							
	Beloit													1																	
Mich	East Saginaw					2								1																	
	Flint					1										1															
	Lansing																														
Iowa	Keokuk															1		1													
	Dubuque													1																	
Mo	Saint Louis	3	1	5	1		1	4		3		3	1	3		16	3	2		3	1			1		1				1	
Nebr	Omaha													1										1						1	
Colo	Boulder																														
Utah	Salt Lake City	1				1										1										1					
Cal	Sacramento			1						1						1				1											
	Los Angeles			2																											
	Vallejo									1						1															
	Total	100	8	46	11	204	6	19	1	45	1	21	1	100	2	284	48	37	5	114	12	6	1	17	2	45	2	60	3	11	2

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE MONTH ENDING DECEMBER 31, 1880.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption. Admitted.	Consumption. Discharged.	Consumption. Died.	Consumption. Remaining.	Croup. Admitted.	Croup. Discharged.	Croup. Died.	Croup. Remaining.	Diarrhœal diseases. Admitted.	Diarrhœal diseases. Discharged.	Diarrhœal diseases. Died.	Diarrhœal diseases. Remaining.	Diphtheria. Admitted.	Diphtheria. Discharged.	Diphtheria. Died.	Diphtheria. Remaining.	Fever, enteric. Admitted.	Fever, enteric. Discharged.	Fever, enteric. Died.	Fever, enteric. Remaining.	Fever, malarial. Admitted.	Fever, malarial. Discharged.	Fever, malarial. Died.	Fever, malarial. Remaining.
German Hospital	New York, N. Y	General	90	74	12	3	5	4					1				4	2		1	2	5		2	3	2		2
Emigrant Hospital	Ward's Island, N. Y	do	498	286	3	5		3					8	5		5	1	1		1	6	5	1	4	25	24		10
City Hospital	Rochester, N. Y	do	125	67	1	1											2	1				2						
Saint Michael's Hospital	Newark, N. J	do	140	156	14	8	4	9					1			2					2	1		7	4	10		7
Homeopathic Hospital	Philadelphia, Pa	do	40	22																	2				1	1		
Jewish Hospital	do	do	40	16	3																2							
Freedmen's Hospital	Washington, D. C	do	300	260	6		1						1								1				2			
Providence Hospital	do	do	160	108	3	2	2	4					2	2											12	17		12
Freedmen's Hospital	Augusta, Ga	do	50	18	2		1	2						1		1										1		1
Cincinnati Hospital	Cincinnati, Ohio	do	500	348	28	7	7	29					4	4		2					3	4	2	4	6	3		11
Saint Louis Hospital	Saint Louis, Mo	do	250	59	2	1	1	8						1											14	17		20
Saint John's Hospital	do	do	75	25		1		1						1		1						1				1		
German Hospital	San Francisco, Cal	do	150	80	4	2	1	4													2	4	1	1	3	3		1
Naval Hospital	Chelsea, Mass	do	100	11				1																				
Do	Brooklyn, N. Y	do	115	43		2		4													1			1	1			
Do	Washington, D. C	do	50	13									1	1											2	1		2
Do	Mare Island, Cal	do	77	41	1			6					1	1		1												
Women's Hospital of Illinois	Chicago, Ill	Women	20	16																								
Hospital for Insane	Middletown, Conn	Insane	530	529																								
Retreat for Insane	Hartford, Conn	do	150	138																								
New York City Lunatic Asylum	Blackwell's Island, N. Y	do	1256	1298																								
Willard Asylum	Willard, N. Y	do	1594	1666																								
State Hospital for Insane	Danville, Pa	do	700	387																								
West Pennsylvania Hospital for Insane	Dixmont, Pa	do	500	593																								
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	367																								
Michigan Asylum for Insane	Kalamazoo, Mich	do	670	666																								
Insane Asylum of California	Stockton, Cal	do	1110	1111																								

Name of hospital.	Place.	Character of hospital.	Fever, scarlet. Admitted.	Fever, scarlet. Discharged.	Fever, scarlet. Died.	Fever, scarlet. Remaining.	Lung diseases, acute. Admitted.	Lung diseases, acute. Discharged.	Lung diseases, acute. Died.	Lung diseases, acute. Remaining.	Measles. Admitted.	Measles. Discharged.	Measles. Died.	Measles. Remaining.	Puerperal diseases. Admitted.	Puerperal diseases. Discharged.	Puerperal diseases. Died.	Puerperal diseases. Remaining.	Smallpox. Admitted.	Smallpox. Discharged.	Smallpox. Died.	Smallpox. Remaining.	Totals. Admitted.	Totals. Discharged.	Totals. Died.	Totals. Remaining.
German Hospital	New York, N. Y	General					6	5		4													28	17	5	88
Emigrant Hospital	Ward's Island, N. Y	do	6	1	3	6	34	13	2	22	8	10	1	5	1	1							371	293	19	345
City Hospital	Rochester, N. Y	do																					31	22	4	70
Saint Michael's Hospital	Newark, N. J	do					2	1															78	68	17	149
Homeopathic Hospital	Philadelphia, Pa	do					2	2															28	23	1	38
Jewish Hospital	do	do																					25	16		25
Freedmen's Hospital	Washington, D. C	do					9																78	78	7	256
Providence Hospital	do	do																					109	92	7	112
Freedmen's Hospital	Augusta, Ga	do					2			2													4	2	1	13
Cincinnati Hospital	Cincinnati, Ohio	do																					279	216	22	380
Saint Louis Hospital	Saint Louis, Mo	do																					58	47	5	63
Saint John's Hospital	do	do					1																31	25	3	25
German Hospital	San Francisco, Cal	do					1	1	1						2								30	28	7	75
Naval Hospital	Chelsea, Mass	do						2																2		8
Do	Brooklyn, N. Y	do					1			4													3	3		9
Do	Washington, D. C	do					4	1		6	1			1									18	9		22
Do	Mare Island, Cal	do																					2	1		7
Women's Hospital of Illinois	Chicago, Ill	Women																					8	3		12
Hospital for Insane	Middletown, Conn	Insane																					22	8	4	541
Retreat for Insane	Hartford, Conn	do																					7	12	1	132
New York City Lunatic Asylum	Blackwell's Island, N. Y	do																					39	37	7	1293
Willard Asylum	Willard, N. Y	do																					23	5	8	1676
State Hospital for Insane	Danville, Pa	do																					10	5	1	391
West Pennsylvania Hospital for Insane	Dixmont, Pa	do																					21	11	10	593
Pennsylvania Hospital for Insane	Philadelphia, Pa	do																					6	19	1	353
Michigan Asylum for Insane	Kalamazoo, Mich	do																					19	10		672
Insane Asylum of California	Stockton, Cal	do																					9	6	8	1108

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NOTICE.—The authorities of all cities supplied with the new form of postal card recently adopted by the National Board of Health are requested to return any remaining cards of the old form, and to fill up the new forms as completely as possible.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880-'81.															
Ireland	Belfast	230,000	Dec. 25	76	17.2	.....	.....	.....	.....	.....	.....	26	2	.....	.....	6	1	38.4
Do	....do	230,000	Jan. 1	111	25.2	.....	.....	.....	.....	.....	.....	19	1	.....	.....	.....	.....	36.5
Do	Queenstown	10,000	Dec. 25	6	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
Do	....do	10,000	Jan. 1	9	46.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....
Do	....do	10,000	Jan. 8	3	15.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Scotland	Dundee	155,000	Dec. 25	58	19.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	33
Do	....do	155,000	Jan. 1	75	25.2	.....	.....	.....	.....	.....	.....	1	.....	1	.....	10	.....	32
Do	Leith	58,480	Jan. 1	29	25.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	35
England	London	3,664,149	Dec. 25	1,242	17.7	.....	.....	.....	.....	.....	15	.....	39	.....	.....	.....	260	48.6
Do	....do	3,664,149	Jan. 1	1,618	23.5	.....	.....	.....	.....	.....	14	.....	17	.....	.....	.....	154	40.6
Do	Bradford	197,196	Dec. 25	94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Do	....do	197,196	Jan. 1	128	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	9	.....
Do	Bristol and Clifton	213,500	Dec. 25	81	19.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	42
Do	....do	213,500	Jan. 1	118	28.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	41
Do	Liverpool	544,056	Jan. 1	311	29.8	.....	.....	.....	.....	.....	.....	1	2	32	6	45	25	39
France	Havre	92,068	Jan. 1	55	31.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
Switzerland	Zurich	22,103	Dec. 18	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	22,103	Dec. 25	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Rotterdam	148,123	Dec. 31	78	27.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	3	.....
Do	Amsterdam	316,952	Dec. 25	124	20.3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	6	46
Belgium	Antwerp	173,643	Dec. 18	66	19.8	.....	.....	.....	.....	20	6	.....	.....	32	.....	1	.....	.....
Do	....do	173,643	Dec. 25	72	21.6	.....	.....	.....	.....	11	4	27	1	.....	.....	1	1	.....
Germany	Barmen	95,000	Dec. 18	38	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	41
Do	Berlin	1,096,644	Dec. 18	452	21.4	.....	.....	.....	.....	.....	.....	17	12	1	1	95	60	36
Do	Bremen	109,000	Dec. 18	39	18.6	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....
Do	Brunswick	74,000	Dec. 25	40	28.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	5	46
Do	....do	74,000	Jan. 1	41	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	3	38
Do	Cologne	144,225	Dec. 25	51	18.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Dresden	220,216	Dec. 25	94	22.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	14	44
Do	Frankfort	130,000	Dec. 25	52	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	43
Do	....do	130,000	Dec. 31	38	15.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	39
Do	Mannheim	53,000	Dec. 31	20	20.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
Do	Nuremberg	99,777	Dec. 11	45	23.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	40
Do	....do	99,777	Dec. 18	38	19.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	40
Italy	Genoa	185,000	Jan. 1	89	25.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
Do	Rome	304,192	Dec. 11	179	30.6	.....	.....	.....	.....	.....	20	.....	5	.....	.....	.....	9	48
Do	....do	304,192	Dec. 18	225	38.4	.....	.....	.....	.....	.....	25	.....	3	.....	.....	.....	12	53
Austria	Vienna	746,243	Dec. 25	400	28.0	.....	.....	.....	.....	.....	21	.....	5	.....	.....	.....	13	39
Roumania	Bucharest	200,000	Dec. 25	109	31.9	.....	.....	.....	.....	.....	1	.....	8	.....	1	.....	8	.....
Russian Poland	Warsaw	357,169	Dec. 18	155	22.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29
Russia	Riga	.....	Dec. 25	.....	.....	.....	.....	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	34
Sweden	Stockholm	169,429	Dec. 18	97	29.8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	14	19
Norway	Christiania	116,801	Dec. 18	43	19.8	.....	.....	.....	.....	2	.....	9	2	.....	.....	15	5	19
Africa	Cape Town	35,000	Dec. 13	31	46.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
East Indies	Calcutta	429,535	Dec. 4	347	41.9	.....	43	.....	.....	.....	.....	.....	17	.....	.....	.....	1	67

ABSTRACTS FROM CONSULAR REPORTS.

CALCUTTA, INDIA.—The report of the health officer, K. McLeod, surgeon-major, for the month of October, states that 766 births and 1,068 deaths were registered. The annual birth-rate was 21.4, while the death-rate was 29.8 per 1,000. It is noted that the mortality among the mixed races was less than that among the pure, of whatever nationality.

SAGUA LA GRANDE, CUBA.—The commercial agent of the United States at this port states, under date of January 1, that the shipping is remarkably free from disease, and that no epidemic has prevailed in the town for a long time. During the month of December the weather was unusually cold, and some deaths from diphtheria and croup occurred among children. The chief cause of mortality is phthisis, and the disease is ascribed rather to the negligence of sanitary and hygienic conditions, and to the frequency of syphilitic infection, than to the climate.

TURK'S AND CAICOS ISLANDS, WEST INDIES.—The report for the week ending November 27 states that one death from yellow fever had occurred there during the week. Two deaths are reported from all causes in a population of 3,500. The patient who is said to have died from yellow fever was not a resident, but was landed from the steamship Santo Domingo while sick with the fever, and died soon after.

SAINT LOUIS, MO.—Dr. R. Luedeking forwards a report of mortality in Saint Louis for the year 1880, in which the population is estimated at 340,000 for the middle of the year, and the death-rate is stated as 18.9 per 1,000. The mortality from zymotic diseases has been less than that of the preceding year, in the proportion of 27.6 to 30.1 per cent. of all deaths.

The rate of infant mortality was rather higher than that of 1879, and the deaths under 5 years were 44.26 per cent. of the total. About one-half of these deaths were caused by pneumonia and convulsions; the latter being a convenient and indefinite name for a variety of infantile diseases. Cases so reported were, however, classified so far as it was possible to ascertain the cause. During the year, 7,299 births were recorded, but the number was probably greater.

SANITARY CONVENTION IN MICHIGAN.

Dr. B. Cogshall, secretary of the Michigan State board of health, announces that a sanitary convention will be held under the auspices of that board at the city hall of Flint, Mich., on January 25 and 26, 1881. Papers on subjects of general interest pertaining to the public health will be presented, and makers of all kinds of sanitary apparatus or appliances are requested to send specimens of their articles for examination. Certificates of merit will be awarded to such articles as may be judged worthy of the same.

Dr. James H. Wroth, of Camden, N. J., desires to correct the figures which are given in his report on small-pox, and printed in No. 28, page 633, as follows: "Total number of cases, 335; white 213, colored 122." On the fourth line below, read variola, 233 cases.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

"August 22d the consul at Point-à-Pitre, Guadeloupe, declared 'that the number of deaths from yellow fever far exceed the number reported,' and that 'the authorities try to suppress all information on the subject.' These plain and honest declarations were as exceptional as they were instructive, and in marked contrast to the course of the consul at Martinique, who, it is asserted, gave clean bills of health long after the British consul refused to give clean bills on account of the prevalence of yellow fever at that port. The conclusion has been fully established from many instances such as have been referred to, that consular agents are too frequently influenced by commercial or other interests at the place of their official residence to act independently in this matter. Ignorance of the actual state of the public health from concealment by the health authorities undoubtedly contributes to make these occurrences more frequent.

The extensive commerce now existing between ports in which yellow fever is endemic, and the numerous ports in our own country within the yellow-fever zone, demands on the part of our own representatives, at ports where this disease exists, or where it is liable to occur, the utmost vigilance and conscientiousness in their reports through bills of health or otherwise.

The National Board of Health has rendered good service in correcting this difficulty at Havana. Its paid representative at that port, a physician of established reputation, fills up the bills of health, and the consul-general certifies to that fact. This arrangement has given entire satisfaction at this port. It is to be earnestly hoped that the co-operation of the State Department at Washington will be given to enable the National Board to introduce its forms of bills of health in every port liable to be infected with yellow fever.

It is scarcely to be expected that the National Board, with its present financial resources, can establish medical representatives at even the principal ports of the West Indies. From consular agents, therefore, in the future as in the past, must be obtained the only representations as to the health of the ports to which they are accredited for the guidance of the officers of quarantine. Should the general government, through the Secretary of State, consider it proper to urge upon consuls the necessity of a careful consideration of the character and extent of diseases prevalent within their official jurisdiction, and a conscientiously faithful representation of the facts, it is believed much more reliable information would be given to the health authorities at our quarantine.

Dr. Smith, under date of January 20, adds the following remarks upon the quarantine of New York:

The number of vessels arriving at the port of New York from ports infected or liable to be infected by yellow fever, between May 15, 1880, and the 1st of November following was 968.

The number of vessels arriving from ports actually infected, 291.

The number of vessels that had sickness at the port of departure, or on the passage to this port, 137.

The total number of cases admitted to the quarantine hospital during the season was 99.

Forty-five of this number were severe cases of typho-malarial fever, and twenty-six of the ordinary malarial fever of tropical or semi-tropical climates—total, 71; of this number seven died.

Twenty-seven cases of yellow fever have occurred, of which ten proved fatal. Three of the fatal cases died in quarantine before removal to hospital, and one was moribund when admitted.

The cases of typho-malarial fever arriving on vessels from Port de Paix, with logwood, were particularly severe.

The bark *Treci Dubrovaeki* arrived at lower quarantine from Port de Paix, with logwood, June 24. Soon after leaving for New York (June 4 and 5), two of her crew were taken sick but recovered. June 6 another seaman was taken sick and died the 10th of the same month. On the last-mentioned date six others were taken and were sick when the vessel arrived. June 15 the captain sickened and died the day before reaching port. There was no record of the date when others were taken sick, as the mate and a boy were all that remained to do duty. Eleven men were sent to the quarantine hospital, of whom three died, one being moribund when admitted. Two of the crew had died on the passage. In a crew of fifteen "all told," all had been or were sick on arrival, and one-third of the number died.

September 18 the bark *Erinagh* from Port de Paix, with logwood, navigated by ten men when she left that port, arrived at lower quarantine in tow of the steamship *City of Washington*. This vessel had eight men sick on the passage, two of whom died before reaching port. Four men and one boy were sent to the hospital on arrival. When picked up by the *City of Washington* the *Erinagh* was in a helpless condition, in mid-ocean, for want of well men to navigate her.

The condition of these vessels was extremely filthy. The malarial influence of this pestilential locality was superadded to the effects of the ill-conditioned cargo, and the crowded, badly ventilated, and terribly foul forecastle in which sick and well were huddled together.

The brig *Oliver Cutts*, from Port de Paix, with logwood, navigated by nine men, arrived July 2. Seven men were sick on the passage; one of them had died at sea; four were removed to hospital on the day of arrival, and two others the day following.

August 6, the schooner *A. J. Fabens* entered quarantine from Port de Paix, with logwood, navigated by seven men. The captain, mate, and steward were sick and were sent to hospital. On the 7th, two seamen were also removed to hospital. The condition of the *Oliver Cutts* and *A. J. Fabens* was much more cleanly than the other vessels to which reference has been made, and the cases of fever were proportionately mild in their course and fortunate in their result.

The sickness on these vessels has been referred to to call attention to facts which are well known to quarantine officials, and often not a little embarrassing.

Fever of this type, as also that which is known as pernicious fever, has many symptoms during the initial stages in common with yellow fever. And as those cases usually come from localities in which yellow fever frequently occurs, or prevails as an endemic, their admission to the city would occasion frequent alarm; particularly when, as has occurred during the past season, yellow fever has been removed from the same vessel with cases of malarial and typho-malarial fever. However confident the medical officer at quarantine may be that the case is not yellow fever, it is a wise precaution, for reasons stated, to send these cases to the quarantine hospital for observation and treatment.

The cases which are designated as typho-malarial have different morbific elements which unite to produce the type mentioned. 1st. The malarial poison, whatever that may be, generally received among the marshes and lowlands which border many of the ports in a tropical or semi-tropical climate, and perpetuated by the ill condition of the cargo. The logwood which constitutes the cargo is usually dragged through the water some distance, and stowed under the hatches, thoroughly saturated with water. 2d. The dietetic deficiency which often exists among seamen; and, 3d. The insufficiently ventilated, crowded, and filthy condition of the forecastle.

The malarial element in these cases was doubtless the original cause, and the typhus symptoms which gave the cases a serious aspect, and sometimes fatal results, the consequence of unsanitary conditions. Except those cases which entered the hospital moribund, or desperately ill, all, with one exception, recovered under the use of quinine, the moderate use of stimulants, and a liberal supply of nourishment. The fatality in the exceptional instance was the result of complications as unexpected as they were unusual.

The decision of the Surgeon-General which denies to this class of cases aid from the United States authorities at this port, has, during the past season, resulted in considerable embarrassment and loss to the superintendent of the quarantine hospital.

Shippers engaged in the logwood trade would find it a measure of economy of money, human life, and suffering to employ lighters of considerable draft to convey the logwood from the shore to the vessel, instead of dragging it through the water, as is done, and in a thoroughly wet condition, stowing it in the vesssel, where often for weeks subsequently it is subjected to the influence of tropical heat.

The theory of quarantine is based upon methods whereby the poison germs of infectious and contagious disease are destroyed.

During the past season no vessel has been compelled to receive her cargo in quarantine; nor has any been detained longer at the discharging anchorage than sufficed to discharge cargo, cleanse and disinfect. Even in the largest steamships in the trade with the West Indies, this is often accomplished in from two to three days—in less time than the same work could be done at the dock, owing to the facility with which lighters can be employed on both sides of the vessel.

HAVANA, CUBA.—During the week ending January 7 there were 4 deaths from yellow fever, of which 2 were among the citizens and 2 in the military hospitals. From small-pox, there were 13 deaths in Havana, and the disease is reported to be prevailing in other places, especially to the westward.

FERNANDINA, FLA.—The following resolution concerning the quarantine station at Sapelo Sound has been adopted by the local board of health:

At a meeting of the board of health, held on the 5th day of January, 1881, the following resolution was adopted:

"*Resolved by the Board of Health of the city of Fernandina, Fla.*, That we regard the action of the National Board of Health in establishing a health and quarantine station on Blackbeard Island, Sapelo Sound, Ga., as tending very greatly towards the prevention of epidemics being introduced from foreign ports along the Southern Atlantic coast, and a measure absolutely necessary towards the prevention of dangerous epidemics. We therefore most earnestly call the attention of the Representatives in Congress, and especially the Representatives from Florida and Georgia, to the urgent necessity of an appropriation to carry on said health station, and ask them to present this matter before Congress at the earliest moment."

The clerk was instructed to forward a copy to the National Board of Health at Washington, D. C., and to each of our Representatives.

C. A. HALEY,
Mayor and Chairman Board of Health.

W. F. WOOD, Jr., *Clerk.*

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DELEGATES TO THE INTERNATIONAL SANITARY CONFERENCE.

The Hon. Secretary of State, under date of January 18, informs the National Board of Health that the government of China will be represented in the conference by His Excellency Chên, envoy extraordinary and minister plenipotentiary of China at this capitol.

The following reports for the week ending January 15, 1881, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; under 5 years, 2; accidents 2, consumption 1, diphtheria 2. Allegheny, Pa., 78,000; deaths, 14; under 5 years, 7; cerebro-spinal meningitis 1, consumption 1, diphtheria 2, scarlet fever 2, pneumonia 2, bronchitis 1. Bath, Me., 8,000; deaths, 2; croup 1. Belfast, Me., 5,308; deaths, 2; consumption 1, congestion of lungs 1. Bowling Green, Ky., 6,000; deaths, 2; under 5 years, 1; Bucyrus, Ohio, 3,950; death, 1. Brattleborough, Vt., 6,000; no deaths. Calais, Me., 6,162; deaths, 2; congestion of lungs 1, old age 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 3; under 5 years, 2; old age 1. Circleville, Ohio, 6,000; deaths, 3; pneumonia 1, bronchitis 1. Clinton, Mich., 1,200; no deaths. Columbus, Ga., 10,000; deaths, 7; accidents 2, consumption 3, pneumonia 1. Corinth, Miss., 2,264; deaths, 3; under 5 years, 2; cerebro-spinal meningitis 1, bronchitis 1. Crystal Springs, Miss., 955; death, 1. Dallas, Tex., 10,630; deaths, 5; under 5 years, 1; consumption 3. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Flint, Mich., 9,000; deaths, 3; accident 1, consumption 1. Gunn City, Mo., 150; no deaths. Huntingdon, Pa., 4,500; no deaths. Huntingdon, Tenn., 1,200; deaths, 3; under 5 years, 2; accidents 2, old age 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 2, under 5 years. Kenosha, Wis., 5,500; deaths, 3; under 5 years, 1; diphtheria 2. LaSalle, Ill., 8,885; deaths, 2; under 5 years, 1; consumption 1, measles 1. Louisiana, Mo., 5,200; congestion of lungs 1. Madison, Ind., 9,000; deaths, 2; consumption 1. Marquette, Mich., 4,000; no deaths. Martinsburg, W. Va., 6,384; deaths, 3; under 5 years, 2; croup 2, puerperal 1. Meridian, Miss., 4,000; deaths, 2; consumption 1. Milan, Tenn., 1,800; consumption 1. Milledgeville, Ga., 3,000; deaths, 3; under 5 years, 1; consumption 1, pneumonia 1, old age 1. Monmouth, Ill., 6,000; deaths, 4; diphtheria 1, old age 1. Morton, Miss., 200; no deaths. Mount Pleasant, Iowa, 4,500; death, 1, under 5 years. Muscatine, Iowa, 8,412; deaths, 2; consumption 1, scarlet fever 1. Muskegon, Mich., 11,300; deaths, 3; consumption 1, congestion of lungs 1, old age 1. Nebraska City, Nebr., 5,200; deaths 2; consumption 1, pleurisy 1. Niles, Mich., 4,200; deaths, 2; under 5 years, 1. Painesville, Ohio, 5,500; puerperal 1. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,700; deaths, 2; consumption 1. Pleasant Hill, Miss.; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; accident 1. Rensselaer, Ind., 900; no deaths. Rock Island, Ill., 12,000; deaths, 5; under 5 years, 2; cerebro-spinal meningitis 1, croup 1, scarlet fever 1. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 21,000; deaths, 10; consumption 1, croup 1, malarial fever 1, old age 2. Starkville, Miss., 1,454; no deaths. Steubenville, Ohio, 13,500; deaths, 5; under 5 years, 3. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths, 2; typhoid fever 1. Tuscaloosa, Ala., 2,000; death, 1, under 5 years. Winchester, Va., 5,000; deaths, 3; accident 1. Winona, Minn., 10,000; pleurisy 1. Youngstown, Ohio, 15,089; deaths, 3; under 5 years, 1; accident 1, typhoid fever 1, pneumonia 1. Total population, 390,800; deaths under 5 years, 33; total number of deaths, 123; annual rate per 1,000, 16.4.

NOTICE.

The attention of health officers and others who fill the weekly reports of mortality in cities of the United States, is especially invited to the change of form in the cards, and in the table compiled from them. In the column for the number of deaths, white and colored, those places only will hereafter be noted whose reports are definitely known to separate the diseases and the deaths of the two races, and which can furnish the respective populations. All populations not agreeing with those previously given have been changed in accordance with the figures furnished by the Census Bureau, and remain subject to correction from that office.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 15, 1881.

State.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	7	10.8			7						2		3.1							
	Bangor	16,857	3																			
N. H	Concord	13,836	5	18.5			5						1									
Vt	Burlington	11,364	3	13.5	11,248	116	2	1	9.3		1,285		1									
Mass	Boston	362,535	174	25.0			171	3	24.1	31.4			64	2	9.2		4				25	
	Cambridge	52,741	23	20.9			23						7		6.3		1				1	
	Edgartown	1,301	1	40.1			1															
	New Bedford	26,875	9	17.2			9						4		7.6						2	
	Newburyport	13,537	5	18.5			5										2				1	
	Marblehead	7,467	4	27.9	7,461	16	4		28.0				2		13.9				1			
	Nantucket	3,726	1	14.0																	1	
	Plymouth	7,094	5	37.7			5														1	
	Fall River	49,006	22	23.4			22						16		17.0						2	
	Lowell	59,485	19	16.6			19						6		5.2		2				3	
	Lawrence	39,178	13	17.4			13						2		2.7						2	
	Worcester	58,295	17	15.2			17						10		9.0						2	
	Lynn	38,284	12	16.3			12						2		2.7						1	
	Brockton	13,608	3	11.5			3						1		3.8							
	Holyoke	21,851	11	26.0			11						6		14.2						3	
	Bridgewater	3,620	2	28.6	3,600	20	2															
	Milford	9,310	2	11.3			1	1														
	Chicopee	11,325	2	9.5			2						1		4.7							
	Fitchburgh	12,405	6	24.7			6						2		8.2						1	
	Somerville	24,985	7	14.6			7						2		4.2		1					
	Springfield	33,340	1	1.6			1						1		1.6							
R. I	Providence	104,852	47	23.3	101,052	3,800	45	2	23.2	27.4			13	1	6.6	13.2	2				12	
Conn	New Haven	62,882	27	22.0			27						4		3.2						4	
	New Britain	13,978	4	14.8			4						1		3.9						3	
	Waterbury	20,209	4	10.2			4						1		2.5						1	
	Fairfield	3,748	1	13.9	3,500	248	1															
N. Y	New York	1,206,597	719	30.4			703	16									15		5		103	
	Brooklyn	566,689	274	25.3			271	3					116	2	10.7		6				25	1
	Yonkers	18,892	6	16.5			6															
	Poughkeepsie	20,200	7	16.2			6	1					1		2.3						1	
	Utica	33,913	8	12.2			8						2		3.0		1					
	Rochester	89,363	24	13.9			24						6		3.5				1		6	
	Buffalo	155,137	49	16.5									16		5.5		1				7	
	Cambridge	1,850																				
N. J	Hudson County	187,950	118	32.7									31		8.6		3				11	
	Newark	136,400	73	27.9									29		11.1		6		2		16	
	Orange	13,206	4	16.0									2		8.0							
	Camden	41,658	19	23.7									6		7.9						2	
	Plainfield	8,126	4	26.1									3		19.5							
Pa	Philadelphia	846,980	366	22.5			337	29					110		6.8		3		3		59	5
	Pittsburgh	156,381	69	23.0									34		11.3		6				8	
	Erie	27,730	6	11.3			6														3	
Del	Wilmington	42,499	16	19.6	38,000	6,000	14	2					5	2	6.1	17.4					4	
D. C	District of Columbia	180,000	82	23.7	120,000	60,000	50	32	21.6	27.7			11	16	4.9	13.8		1			9	8
Va	Norfolk	21,966	19	45.0			11	8					1	1	4.7							5
	Richmond	63,803	44	36.0			16	28					3	10	10.6		2	3				3
	Lynchburg	15,959	16	52.3															1		2	3
S. C	Charleston	50,000	40	41.7			10	30	20.9	48.9			3	10	13.5						2	6
Ga	Augusta	23,023	10	22.6			6	4					2	2	9.0						2	
	Atlanta	34,398	14	21.2			4	10						3		4.6	1					2
	Savannah	30,681	26	44.2			15	11					6	6	20.4							1
	Rome	5,000	1	10.4			1															
	Brunswick	2,900	2	36.0			1	1														
Fla	Jacksonville	10,000	5	26.1			2	3					1	2	15.6						1	
	Key West	12,000	4	17.4	8,000	4,000							2	1	13.0	13.0						
Ala	Mobile	31,205	26	43.4			9	17					2	6	13.3					1	3	3
Miss	Columbus	5,230	1	19.9	2,760	2,570	1		19.9									1				
	Natchez	7,000	4	29.4			4						1								2	
	Vicksburg	11,814	11	48.5			6	5						2		8.8					1	1
La	New Orleans	216,140	145	35.0			90	55					22	19	9.8		1	3	2		11	11
	Baton Rouge	7,187	1	7.2	2,954	4,233		1														
	Shreveport	11,017	7	33.2			2	5					1		4.8							1
Tex	Waco	8,000	4	26.0			2	1													1	
	Galveston	22,308	9	21.0			8						2	1	7.0						8	2
Tenn	Memphis	33,593	22	34.1			8	14					1	6	11.4							
	Nashville	43,461	19	22.8	27,874	15,669	9	10					4	5	10.3							1
	Clarksville	7,250			4,000	3,250																
	Murfreesboro'	21,850			2,000	1,850																
Ky	Louisville	123,645	43	18.1			36	7					9	1	4.2						8	2
Ohio	Cincinnati	255,708	111	22.6									44	4	9.8		1				13	2
	Portsmouth	11,314	6	27.6			5	1			1,415	125	1		4.9						1	1
	Gallipolis	4,500																				
	Dayton	38,677	13	17.3									4		5.3				1		1	
Mich	Lansing	8,850	3	17.7									2		11.8				1			
	Plymouth	3,000	1	17.1																		
	East Saginaw	19,016	11	30.1									3		8.2						1	
Ind	Indianapolis	75,074	28	19.3									8		5.5		2				5	
	Richmond	12,743	2	8.2			1	1														
	Evansville	29,280	14	24.9									6		10.7				1		1	
Ill	Peoria	29,315	5	8.9									2		3.5						2	
	Aurora	11,825	3	13.2			3						2								1	
	Moline	8,250	2	13.0	8,000	250							1	1	6.5							
	Jacksonville	10,927	1	4.7			1							1		4.7						
	Elgin	8,770	6	35.7			6						3		17.8							
Wis	Milwaukee	115,578	50	22.5									21		9.4				1		4	
	Watertown	10,000	4	20.8									1		5.2						1	
	Beloit	5,180	4	40.2	5,000	180							2		20.1							
Minn	Saint Paul	41,498	10	12.6																		
Iowa	Dubuque	22,254	8	18.8			8															
	Keokuk	12,117	5	21.5			3	2					1		4.3		1					
Mo	Saint Louis	351,000	136	20.2									42	11	7.9		5	1			20	2
Kans	Lawrence	8,500	3	18.0	6,800	1,700	2	1					1		6.0							
Colo	Omaha	30,518	13	22.2									8		13.7						2	
	Boulder	3,030	2	34.4									1		17.2							
	Salt Lake City	20,768	16	40.2									8		20.1				1			
	San Francisco	233,956	81	18.0									24		5.3						12	
	Sacramento	20,768	6	14.6									1		2.4		2				2	
	Los Angeles	11,311	2	13.8									1		4.6						1	
	Vallejo	7,000	1	7.4							6,250	750	1		8.3							

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 15, 1881.

State.	Cities.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		FEVER. Malarial.		FEVER. Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		ACUTE LUNG DISEASES. Congestion of lungs.		ACUTE LUNG DISEASES. Bronchitis, acute.		ACUTE LUNG DISEASES. Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
		W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	1														1		1													
	Bangor																														
N. H	Concord															3															
Vt	Burlington																		1												
Mass	Boston	6		3	1	21		1		2						16	1	1		7				6	1	3				1	
	Cambridge			1												5															
	Edgartown																														
	New Bedford					1										1				1		1									
	Newburyport							1																							
	Marblehead					2										1															
	Nantucket																														
	Plymouth															1															
	Fall River	2		1																				1							
	Lowell			1		1		1		1										1										1	
	Lawrence							1																						1	
	Worcester	2												3		5								1							
	Lynn					1										5															
	Brockton					1																									
	Holyoke	2								1								1													
	Bridgewater																														
	Milford																														
	Chicopee							1																							
	Fitchburgh					1										2															
	Somerville	2																		2											
	Springfield																														
R. I	Providence	1				1		1								6	1			2						2					
Conn	New Haven							1				1				4		1													
	New Britain																														
	Waterbury																														
	Fairfield																														
N. Y	New York	25		9		50		7		7		10		42		93		39						5		15		9		5	
	Brooklyn	17		1		41		3		2		4		13		29	1	1		11		2				6				3	
	Yonkers															1		1													
	Poughkeepsie													1					1	1											
	Utica																														
	Rochester	1				4		1								1		1		1										2	
	Buffalo	1		1				1		1		1				5														1	
	Cambridge																														
N. J	Hudson County	3				5				2		1		2		17		1		5								2			
	Newark	5				1		2						2		4				6											
	Orange															2															
	Camden			1		1				2						2												2			
	Plainfield	1																													
Pa	Philadelphia	5				11		4		8	1			14		25	3	3		13	1	1						35	5	3	
	Pittsburgh	2				5				2				10		7				1										2	
	Erie									1																					
Del	Wilmington	1								1					1		1											1	1		
D. C	District of Columbia				1					1		2	1	1		9	5	1		2	3					1	2				
Va	Norfolk			1		1										2	1	1													
	Richmond											2				1	2		1	2								1		1	
	Lynchburg																				1							1			
S. C	Charleston				1											1	2	2	1												
Ga	Augusta					1																				1					
	Atlanta									1		1					1	1													
	Savannah				1	1										3	2														
	Rome																														
	Brunswick				1																										
Fla	Jacksonville	1																													
	Key West	1			1											1															
Ala	Mobile															1	1				2										
Miss	Columbus																														
	Natchez					1										1															
	Vicksburg			2												1															
La	New Orleans			5	1	2						3	1	4	1	10	14			2						1					
	Baton Rouge																														
	Shreveport																2														
Tex	Waco											2				1															
	Galveston			1												1		2													
Tenn	Memphis			2						1						4	3		1												
	Nashville		1											2		1	3														
	Clarksville																														
	Murfreesboro'																														
Ky	Louisville	1		1						1						2				1						1					
Ohio	Cincinnati			1		3		2		1		1		1		11	1			4	1					2				1	1
	Portsmouth																														
	Gallipolis																														
	Dayton			1												1															
Mich	Lansing															1															
	Plymouth																														
	East Saginaw	1				5						1				1										1					
Ind	Indianapolis			1		1		1		1						1	1	1								1					
	Richmond																														
	Evansville									1	1					3										1	1			1	
Ill	Peoria													2																	
	Aurora															1				1											
	Moline																														
	Jacksonville															1															
	Elgin													3																1	
Wis	Milwaukee	2				4				2						5		2		3											
	Watertown															1															
	Beloit	1				1										1															
Minn	Saint Paul	1								2				1						1											
Iowa	Dubuque			1						2				1		2										1					
	Keokuk															1	1														
Mo	Saint Louis	2			2	2				1		1	2	1		13	5	8		8	2			1	1		1				
Kans	Lawrence																														
Nebr	Omaha	2												1		3		1		1											
Colo	Boulder															2															
Utah	Salt Lake City					3								1		1				1											
Cal	San Francisco			3						1		1		1		7		1		1		1						1		1	
	Sacramento																														
	Los Angeles			1																											
	Vallejo																														
	Total	90	1	38	9	172		28	1	44	2	31	4	106	2	332	51	70	5	78	10	5		14	2	36	6	50	6	24	1

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FIVE WEEKS ENDING DECEMBER 4, 11, 18, AND 25, 1880, AND JANUARY 1, 1881, FROM THE FOLLOWING PLACES.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	3.4	7.4
Concord, N. H	2.2	22.0
Burlington, Vt	1.2	10.8
Boston, Mass	9.6	26.1
Cambridge, Mass	7.4	18.9
Edgartown, Mass	.....	1.6
New Bedford, Mass	6.5	21.8
Newburyport, Mass	3.7	17.1
Marblehead, Mass	11.2	32.1
Plymouth, Mass	4.4	14.7
Lowell, Mass	7.7	18.0
Lawrence, Mass	4.6	18.2
Worcester, Mass	8.2	20.4
Lynn, Mass	5.4	16.3
Brockton, Mass	6.0	14.9
Bridgewater, Mass	.....	11.4
Milford, Mass	3.4	11.3
Chicopee, Mass	4.8	18.2
Fitchburgh, Mass	9.1	19.8
Somerville, Mass	7.1	19.2
Springfield, Mass	4.4	17.7
Providence, R. I	4.8	18.3
New Haven, Conn	6.0	20.2
New York, N. Y	11.4	27.8
Brooklyn, N. Y	10.1	25.1
Yonkers, N. Y	6.6	12.7
Poughkeepsie, N. Y	3.2	9.6
Utica, N. Y	4.0	12.0
Buffalo, N. Y	4.7	16.4
Cambridge, N. Y	11.6	23.3
Seneca Falls, N. Y	5.2	15.6
Hudson County, N. J	7.2	21.7
Newark, N. J	7.9	20.2
Camden, N. J	8.7	21.5
Philadelphia, Pa	6.2	22.4
Pittsburgh, Pa	8.2	20.7
Erie, Pa	1.5	10.5
Wilmington, Del	5.2	15.5
Baltimore, Md	10.7	26.0
District of Columbia	7.2	21.8
Norfolk, Va	13.3	36.5
Lynchburg, Va	5.2	19.0
Charleston, S. C	8.2	29.0
Augusta, Ga	6.8	24.0
Atlanta, Ga	5.4	19.7
Rome, Ga	10.4	29.2
Brunswick, Ga	.....	14.4
Jacksonville, Fla	7.3	16.7
Mobile, Ala	6.3	27.8
Selma, Ala	5.6	30.8
New Orleans, La	6.3	24.0
Shreveport, La	1.9	10.2
Little Rock, Ark	8.7	24.5
Nashville, Tenn	6.9	19.9
Memphis, Tenn	5.9	31.0
Shelbyville, Tenn	21.7	38.0
Cincinnati, Ohio	6.6	21.9
Gallipolis, Ohio	6.9	16.2
Dayton, Ohio	1.6	9.9
Portsmouth, Ohio	3.7	17.5
Evansville, Ind	6.0	14.2
Richmond, Ind	8.2	17.2
Peoria, Ill	7.8	16.7
Jacksonville, Ill	4.8	11.4
Elgin, Ill	11.9	28.6
Aurora, Ill	1.8	11.5
Milwaukee, Wis	13.8	24.2
Lansing, Mich	4.5	9.2
East Saginaw, Mich	1.6	7.1
Omaha, Nebr	3.4	11.3
Salt Lake City, Utah	9.0	23.6
Boulder, Colo	10.3	27.5
Sacramento, Cal	5.3	18.9
Los Angeles, Cal	5.5	17.5
Vallejo, Cal	5.9	19.1

DIAGRAM SHOWING THE SAME FOR THE MONTH OF DECEMBER, 1880, FOR THE FOLLOWING PLACES.

[The populations are corrected by census for the last three places.]

Amsterdam, N. Y	6.3	15.1
Little Falls, N. Y	5.1	13.6
Paterson, N. J	9.2	21.5
Petersburg, Va	6.5	22.3
Chicago, Ill	8.6	19.0

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880–'81.															
Canada	Montreal	135,000	Jan. 1	54	20.8	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	3	8.8
Do	....do	135,000	Jan. 8	68	26.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	13.3
Do	Kingston	15,000	Jan. 15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.8
West Indies	Bermuda	14,867	Jan. 18	5	17.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Do	....do	14,867	Jan. 11	4	14.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
Cuba	Havana	195,437	Jan. 8	128	34.1	.....	.....	.....	4	.....	13	.....	3	.....	.....	.....	.....	77
Bahamas	Nassau, N. P	14,000	Jan. 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
Do	....do	14,000	Jan. 15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
West Indies	Guadaloupe	22,919	Jan. 1	11	25.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hayti	Gonaives	6,000	Oct. 23	2	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
Do	....do	6,000	Oct. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Do	....do	6,000	Nov. 6	5	43.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
Do	....do	6,000	Nov. 13	1	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
Do	....do	6,000	Nov. 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
Trinidad	Port of Spain	30,000	Nov. 6	22	38.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	30,000	Nov. 13	27	46.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	30,000	Nov. 20	37	64.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	30,000	Nov. 27	26	45.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	30,000	Dec. 4	28	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	Matamoros	16,000	Jan. 8	18	58.6	.....	.....	.....	.....	300	10	.....	.....	.....	.....	.....	.....	.....
Do	Vera Cruz	20,000	Jan. 3	48	126.7	.....	.....	.....	22	.....	1	.....	.....	.....	.....	.....	.....	72
Central America	Aspinwall	2,500	Jan. 15	3	62.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Do	Panama	12,000	Jan. 8	3	13.0	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	79
Do	....do	12,000	Jan. 15	10	43.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Brazil	Rio de Janeiro	330,000	Dec. 18	200	31.6	.....	.....	.....	6	.....	.....	.....	3	.....	.....	.....	.....	.....
Do	....do	330,000	Dec. 25	190	30.0	.....	.....	.....	1	.....	2	.....	4	.....	.....	.....	1	.....
England	Liverpool	549,834	Jan. 8	256	24.3	.....	.....	.....	.....	1	.....	.....	.....	25	4	25	28	37
Do	Tunstall	27,775	Jan. 8	10	18.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Sheffield	304,938	Dec. 25	110	18.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
Do	Cardiff	82,364	Jan. 8	32	20.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	41
France	Havre	92,068	Jan. 8	63	35.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
Do	Rouen	104,209	Jan. 8	76	37.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Lyons	342,815	Dec. 11	152	23.1	.....	.....	.....	.....	.....	4	.....	4	.....	.....	.....	3	.....
Do	....do	342,815	Dec. 18	156	23.7	.....	.....	.....	.....	.....	10	.....	2	.....	.....	.....	2	.....
Do	....do	342,815	Dec. 25	134	20.3	.....	.....	.....	.....	.....	5	.....	2	.....	.....	.....	7	.....
Switzerland	Zurich	.....	Jan. 1	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Rotterdam	148,123	Jan. 8	73	25.3	.....	.....	.....	.....	.....	.....	3	1	.....	.....	50	.....	.....
Germany	Berlin	1,006,677	Dec. 25	516	24.7	.....	.....	.....	.....	.....	.....	21	8	2	.....	97	74	41
Do	....do	1,006,677	Jan. 1	455	21.8	.....	.....	.....	.....	.....	.....	22	8	2	.....	116	65	38
Do	Barmen	95,000	Dec. 25	27	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	42
Do	....do	95,000	Jan. 1	34	19.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	46
Do	Bremen	109,000	Dec. 25	42	20.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	Breslau	276,000	Dec. 25	147	27.6	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	18	41
Do	Cologne	144,537	Jan. 1	67	24.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....
Do	Mannheim	33,500	Jan. 8	20	31.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
Saxony	Dresden	220,216	Jan. 1	97	22.9	.....	.....	.....	.....	.....	.....	2	2	.....	.....	11	11	40
Do	Chemnitz	101,115	Dec. 25	47	24.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	43
Do	Leipsic	150,836	Jan. 1	56	19.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	39
Do	....do	150,836	Jan. 8	61	21.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	38
Bavaria	Nuremberg	99,777	Dec. 25	39	20.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	40
Italy	Genoa	185,000	Jan. 8	92	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
Do	Venice	141,017	Nov. 13	70	25.8	.....	.....	.....	.....	.....	8	.....	3	.....	.....	.....	5	46
Do	....do	141,017	Nov. 20	57	21.0	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	4	49
Do	....do	141,017	Nov. 27	73	26.9	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	4	47
Do	....do	141,017	Dec. 4	72	26.5	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	6	43
Do	....do	141,017	Dec. 11	74	27.3	.....	.....	.....	.....	.....	10	.....	1	.....	.....	.....	4	40
Do	....do	141,017	Dec. 18	71	26.2	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	6	44
Do	....do	141,017	Dec. 25	69	25.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	6	42
Austria	Vienna	746,243	Jan. 1	377	26.4	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	19	35
Do	Trieste	128,233	Dec. 19	84	34.2	.....	.....	.....	.....	.....	3	.....	3	.....	.....	.....	1	.....
Hungary	Buda-Pesth	344,604	Dec. 18	239	36.0	.....	.....	.....	.....	.....	10	.....	1	.....	.....	.....	8	.....
Roumania	Bucharest	177,646	Dec. 25	115	33.8	.....	.....	.....	.....	.....	2	.....	8	.....	.....	.....	11	.....
Russia	Warsaw	357,169	Dec. 25	122	17.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	28
Sweden	Stockholm	169,429	Dec. 25	102	31.4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	16	24
Norway	Christiania	116,801	Dec. 25	24	10.7	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	4	4	16
Do	....do	116,801	Jan. 1	36	16.0	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	11	5	16
Portugal	Lisbon	225,152	Nov. 27	148	34.1	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	50
Do	....do	225,152	Dec. 4	153	35.3	.....	.....	.....	.....	.....	.....	.....	12	.....	.....	.....	.....	51
Do	Oporto	108,346	Nov. 27	66	31.6	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	50
Do	....do	108,346	Dec. 4	70	33.6	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	51
Spain	Cadiz	65,028	Dec. 19	61	48.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
Do	....do	65,028	Dec. 26	41	32.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
Do	Malaga	115,882	Dec. 26	71	31.9	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	57
Do	....do	115,882	Jan. 2	86	38.7	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	54
Cape Colony	Cape Town	35,000	Dec. 25	31	46.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
St. Helena	Jamestown	6,240	Dec. 11	4	33.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
Do	....do	6,240	Dec. 18	2	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
Japan	Kobe	18,232	Dec. 4	11	31.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,232	Dec. 11	9	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,232	Dec. 18	7	20.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Indies	Calcutta	429,535	Dec. 11	327	39.7	.....	25	.....	.....	.....	.....	.....	13	.....	.....	.....	1	65
Do	Bombay	644,405	Nov. 16	347	28.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	160	81
Do	....do	644,405	Nov. 23	360	27.4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	157	79
Do	....do	644,405	Nov. 30	362	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	143	81

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, FEBRUARY 5, 1881. [No. 32.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

ABSTRACTS FROM CONSULAR REPORTS.

MATAMOROS, MEXICO.—United States Consul W. P. Sutton, under date of January 8, states that since his last note concerning the exportation of rags suspected of infection from small-pox, the invoice mentioned as being detained has been held with consent of the shipper while awaiting instructions. Dr. C. B. Combe, inspector for the National Board of Health, informs the consul that such rags could be safely and economically disinfected at Matamoros before exportation. Should this not prove practicable, the consul recommends prohibition of the exportation.

PARA, BRAZIL.—United States Consul A. C. Prindle reports for the month of December 124 deaths in a population of 40,000, giving an annual death-rate of 36.5 per 1,000. Among the causes of death were: typhus fever 2, typhoid fever 1. The prevailing diseases were the several forms of malarial fevers.

SINGAPORE.—United States Consul A. G. Studer reports his district free from infectious diseases up to December 20. In November there were 295 deaths, of which fevers caused 81, diarrheal diseases 56, consumption 20, other lung diseases 11, leprosy 2.

MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrheal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
	1880.																			
Providence, R. I	November	104,850	45	146	16.9	30	11	3	5	5	1	7	.....	13	.....	2	.....	3	.....	6
New Haven, Conn	....do	62,882	27	104	18.5	19	5	1	11	.....	4	.....	.....	13	.....	2	.....	1	21	7
Do	December..	62,882	28	102	18.2	12	6	3	5	1	2	.....	.....	12	.....	4	.....	.....	16	10
Amsterdam, N. Y	November .	9,360	7	15	19.5	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	5	1
Do	December..	9,300	5	12	15.6	.....	1	.....	2	.....	.....	.....	.....	2	.....	.....	1	.....	.....	.....
Little Falls, N. Y	November .	6,940	.....	7	12.2	3	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Do	December..	6,940	3	8	12.5	.....	2	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....
Yonkers, N. Y	October	18,892	6	15	9.6	1	1	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Do	November .	18,892	.....	14	9.0	3	.....	.....	1	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....
Kingston, N. Y	....do	19,000	4	14	9.6	2	3	.....	1	.....	2	.....	.....	2	.....	1	.....	.....	.....	1
Syracuse, N. Y	....do	51,790	11	54	12.7	11	4	.....	1	5	1	3	.....	5	.....	.....	.....	.....	.....	.....
Hudson County, N. J	....do	187,950	.....	.....	18.5	42	12	6	10	3	3	5	.....	62	1	5	.....	2	.....	.....
Do	December..	187,950	.....	.....	21.5	42	23	3	12	8	3	8	.....	60	1	9	1	.....	.....	14
Vineland, N. J	....do	8,000	2	10	15.2	3	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Paterson, N. J	November .	50,887	14	75	19.7	7	4	.....	6	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	4
Do	December..	50,887	20	93	22.2	5	9	.....	.....	.....	.....	.....	.....	17	.....	.....	.....	.....	.....	3
Scranton, Pa	November .	45,850	11	29	7.6	2	.....	.....	1	2	.....	2	.....	3	.....	3	.....	.....	8	5
Wilmington, Del	....do	42,500	9	66	18.9	13	4	1	.....	1	.....	5	.....	7	.....	1	.....	1	.....	2
District of Columbia	September	180,000	151	365	24.6	53	9	28	16	5	35	.....	.....	16	.....	.....	.....	2	112	11
Do	October	180,000	64	364	24.6	67	13	16	27	11	26	1	.....	18	.....	2	.....	2	110	12
Do	November .	180,000	117	296	20.0	55	14	8	16	4	13	2	.....	32	.....	6	.....	1	71	11
Do	December..	180,000	121	340	22.9	59	17	5	16	7	3	3	.....	56	.....	4	.....	1	67	12
Norfolk, Va	November .	21,966	36	66	36.4	8	1	1	11	2	4	.....	.....	5	.....	.....	.....	.....	22	3
Do	December..	21,966	17	62	34.2	4	1	3	8	.....	2	.....	.....	10	.....	.....	.....	.....	17	7
Petersburgh, Va	November .	21,650	12	46	25.8	6	.....	4	.....	.....	2	.....	.....	4	.....	1	.....	.....	.....	.....
Do	December..	21,650	12	41	23.0	5	.....	1	.....	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Lynchburg, Va	....do	15,960	8	29	22.1	4	1	.....	.....	.....	.....	.....	.....	5	.....	2	.....	.....	.....	1
Mobile, Ala	November .	31,205	18	90	35.0	17	2	.....	.....	.....	1	.....	.....	7	.....	1	.....	.....	7	2
Selma, Ala	....do	7,505	2	11	17.5	2	.....	2	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	1
Nashville, Tenn	....do	43,460	14	59	16.5	8	1	4	2	.....	.....	.....	.....	5	.....	.....	.....	1	.....	3
Lansing, Mich	....do	8,326	.....	5	7.31	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Ill	December..	503,304	367	814	14.3	55	.....	9	107	.....	6	13	.....	117	2	.....	10	6	279	22
Galesburg, Ill	November .	12,000	.....	12	12.2	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	December..	12,000	.....	8	8.1	1	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Milwaukee, Wis	November .	115,578	66	241	25.4	18	12	6	21	1	5	31	.....	19	3	1	.....	.....	85	2
Do	December..	115,578	69	228	24.0	15	13	1	14	1	5	34	.....	30	.....	.....	.....	.....	89	1
Watertown, Wis	November .	10,000	8	18	21.9	1	1	1	10	.....	.....	.....	.....	1	2	.....	.....	.....	12	.....
Saint Paul, Minn	October	41,500	18	53	15.5	3	2	.....	3	9	.....	.....	.....	6	.....	.....	.....	.....	.....	.....
Do	November .	41,500	19	48	14.1	4	1	1	6	5	.....	.....	.....	6	.....	.....	.....	.....	.....	1
Do	December..	41,500	25	67	19.6	8	3	1	8	2	.....	.....	.....	9	2	1	.....	.....	.....	1
Keokuk, Iowa	November .	12,120	2	8	8.0	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Do	December..	12,120	5	14	14.0	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	3
Virginia City, Nev	November .	1,600	12	17	12.9	6	.....	3	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	1
Do	December..	1,600	6	21	15.9	4	.....	3	.....	3	.....	.....	.....	6	.....	.....	.....	.....	.....	2
Oakland, Cal	November .	34,556	15	32	10.9	5	1	2	.....	1	2	.....	.....	4	.....	.....	.....	1	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 22, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	12	18.5									1		1.5		1				1	
Bangor, Me	16,857	4	12.3									1		3.1							
Concord, N. H	13,838	4	15.1									1		3.8							
Boston, Mass	362,535	182	26.2									76	1	11.1		3				21	
Chelsea, Mass	21,785	13	31.1									6		14.4						5	
Cambridge, Mass	52,740	20	19.6									9		8.8						2	
Edgartown, Mass	1,301																				
New Bedford, Mass	26,875	10	19.4			9	1					2		3.9							
Newburyport, Mass	13,537	5	19.2																		
Marblehead, Mass	7,467	4	27.9									3		21.0							
Nantucket, Mass	3,726	1	13.8																	1	
Plymouth, Mass	7,094	2	14.7									1		7.3							
Fall River, Mass	49,006	23	24.5									7		7.4						5	
Lowell, Mass	59,485	16	14.0									5		4.4		1				7	
Lawrence, Mass	39,178	7	9.3									3		4.0							
Worcester, Mass	58,295	17	15.2									4		3.6						2	
Lynn, Mass	38,284	7	9.5									2		2.7						2	
Brockton, Mass	13,608	4	15.3									2		7.6							
Holyoke, Mass	21,851	5	12.0									4		9.6				1		1	
Milford, Mass	9,310	1	5.6																		
Bridgewater, Mass	3,620	2	29.0																		
Chicopee, Mass	11,325	5	23.0									1		4.6						3	
Fitchburgh, Mass	12,405	5	21.0									1		4.2				1			
Somerville, Mass	24,985	8	16.7																		
Springfield, Mass	33,340	10	15.6									1		1.5						2	
Providence, R. I	104,850	42	20.9			40	2					11	1	6.0		1				7	
New Haven, Conn	62,882	30	27.9									13		10.8				1		3	1
New Britain, Conn	13,978	9	33.5									1		3.7						3	
Fairfield, Conn	3,748	5	7.5									1		1.5							
Burlington, Vt	11,364	6	27.5									1		4.6							
New York, N. Y	1,206,577	667	28.8			664	3					253		10.9		12		3		115	
Brooklyn, N. Y	566,689	289	26.6			285	4					115	3	10.8		9				41	
Yonkers, N. Y	18,890	7	19.3									1		2.7							
Poughkeepsie, N. Y	20,207	6	15.5									3		7.7							
Newburgh, N. Y	18,050	7	20.2									1		2.9						1	
Little Falls, N. Y	6,910	1	7.5																		
Cambridge, N. Y	1,850																				
Seneca Falls, N. Y	6,000	1	8.7									1		8.7							
Utica, N. Y	33,913	16	24.6			15	1					5		7.7						1	
Buffalo, N. Y	155,137	57	19.1									24		8.0		2				5	
Hudson County, N. J	187,950	87	24.1									33		9.1		3				8	
Newark, N. J	136,400	66	25.2			64	2					24		9.2				4		11	
Camden, N. J	41,658	23	28.8									7	1	10.0						1	1
Orange, N. J	13,206	2	7.9									1		3.9							
Plainfield, N. J	8,126	1	6.5																		
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	368	22.6			349	19					103		6.3				3		56	3
Erie, Pa	27,730	3	5.6									2		3.7						1	
Pittsburgh, Pa	156,381	54	18.0			52	2					27	2	9.7		5				8	
Wilmington, Del	42,500	15	18.4			10	5					4	2	7.4				1		4	2
Baltimore, Md	332,190	147	23.0			111	36					65		10.2		4		2		15	5
District of Columbia	180,000	69	20.2			45	24					10	8	5.2		1	1			12	5
Norfolk, Va	21,966	11	26.1			2	9					1	3	9.5							
Richmond, Va	63,803	39	31.9			21	18					3	5	6.5		1	1			4	7
Lynchburg, Va	15,959	12	39.2			4	8					3	1	13.0							1
Charleston, S. C	50,000	24	25.0			9	15					2	3	5.2			1				1
Savannah, Ga	30,681	22	37.4			10	12						10	17.0						5	1
Augusta, Ga	23,023	15	34.0			7	8					3	2	11.3						3	
Atlanta, Ga	34,398	13	19.7			6	7					2	3	7.6						1	1
Rome, Ga	5,000	1	10.4				1						1	10.4							
Brunswick, Ga	2,900	1	18.0				1						1	18.0							
Jacksonville, Fla	10,000	4	20.8			3	1						1	5.2						1	
Key West, Fla	12,000	3	13.0			1														2	
Mobile, Ala	31,205	18	30.1			10	8						2	3.2		1				2	1
Vicksburg, Miss	11,814	8	35.3			4	4					1	2	13.2							
Columbus, Miss	5,230	1	10.0																		
New Orleans, La	216,140	98	23.6			61	37					15	3	4.3		3	3			10	7
Shreveport, La	11,017	6	28.4			2	4						4	18.9							
Baton Rouge, La	7,187	6	43.5			4	2					1	2	21.7							
Morgan City, La	2,018	1	25.8				1						1	25.8							
Galveston, Tex	22,253	21	49.1									7		16.4			1			1	1
Little Rock, Ark	13,185	12	47.4			5	7					1	3	15.8		1		1			
Nashville, Tenn	43,461	17	20.4			11	6					3	2	8.5		1	1			2	1
Murfreesboro', Tenn	3,800	1	13.8				1														
Memphis, Tenn	33,593	30	46.6			19	11					1	2	4.7			1			7	1
Clarksville, Tenn	7,200	1	7.2			1															
Louisville, Ky	123,625	56	23.6			38	18					6	6	5.0						11	6
Cincinnati, Ohio	255,708	108	22.0			101	7					44		9.0		2				24	2
Cleveland, Ohio	160,140	50	16.3													1				8	
Dayton, Ohio	38,677	13	17.4									1		1.3						3	
Gallipolis, Ohio	4,500	1	11.6													1					
Portsmouth, Ohio	11,314	5	23.0			4	1													1	1
East Saginaw, Mich	19,016																				
Flint, Mich	9,000	2	11.6									1		5.8							1
Indianapolis, Ind	75,074	37	25.7			31	6					9		6.2				3	1	4	1
Evansville, Ind	29,280	6	10.7			5	1					3		5.3							
Richmond, Ind	12,743	1	4.1																		
Chicago, Ill	503,304	227	23.5									103		10.7		12		1		29	
Peoria, Ill	29,315	9	16.0									4		7.1		1		1		2	
Aurora, Ill	11,825	6	26.4									2		8.8		1		1			
Jacksonville, Ill	10,927	2	9.5			1	1												1		
Elgin, Ill	8,770	6	35.7									5		29.7							
Moline, Ill	8,000	1	6.5																		
Milwaukee, Wis	115,578	53	23.9									27		12.2				1		5	
Beloit, Wis	5,180																				
Saint Paul, Minn	41,498	12	15.1															4		2	

NOTE.—The reports of population from the Census Bureau do not give the white and colored separately.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 22, 1881.

Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVERS. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Cities and States.
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
														2								1								Portland, Me.
				1																										Bangor, Me.
						1																		1						Concord, N. H.
7		2		24	1	1		2	1			1		15				13				11		1				2		Boston, Mass.
1				3										1		1														Chelsea, Mass.
1				2										3				2						1				1		Cambridge, Mass.
																														Edgartown, Mass.
		1		1												1														New Bedford, Mass.
														1																Newburyport, Mass.
				1										3																Marblehead, Mass.
																														Nantucket, Mass.
																														Plymouth, Mass.
3						1		1						1																Fall River, Mass.
1																														Lowell, Mass.
														4														1		Lawrence, Mass.
						1		1				1		4				3												Worcester, Mass.
														1																Lynn, Mass.
																														Brockton, Mass.
								1																						Holyoke, Mass.
																														Milford, Mass.
																														Bridgewater, Mass.
														1																Chicopee, Mass.
														2																Fitchburgh, Mass.
														3				1												Somerville, Mass.
										1				1										1						Springfield, Mass.
3				3		1								4	1	3		1						2						Providence, R. I.
1														5				1												New Haven, Conn.
								1								1								1						New Britain, Conn.
		1		1						1																				Fairfield, Conn.
														1																Burlington, Vt.
23		7		37		7		4		3		40		81				34				3		12		9		6		New York, N. Y.
6		3		45		1		1		3		17		35		1		13		1		1		8				5		Brooklyn, N. Y.
														2																Yonkers, N. Y.
												1																		Poughkeepsie, N. Y.
1						1								1																Newburgh, N. Y.
																														Little Falls, N. Y.
																														Cambridge, N. Y.
																														Seneca Falls, N. Y.
1														1										2						Utica, N. Y.
5		1		3		2		1				5		4				3												Buffalo, N. Y.
6		2		1		3		3						8				2						4						Hudson County, N. J.
		1		2		1		2						8				2		1										Newark, N. J.
								2				1		3																Camden, N. J.
																														Orange, N. J.
																		1												Plainfield, N. J.
																														Asbury Park, N. Y.
6	1			13		2		12				5		24	2	4		6		1						44	3	1		Philadelphia, Pa.
																1														Erie, Pa.
		2		1				1				9		3	1			3												Pittsburgh, Pa.
1															1															Wilmington, Del.
1		2	1	8	2	1		1		1		9		12	8	1		4	3					2						Baltimore, Md.
2		1		2								1		4	4	1								1				1	1	District of Columbia.
1	1	1													4				1											Norfolk, Va.
		1		1				2	1					1		1														Richmond, Va.
															1							1		1						Lynchburg, Va.
															2	1	1	2												Charleston, S. C.
			1											1	1															Savannah, Ga.
														2	3															Augusta, Ga.
				1					1					1	1	1														Atlanta, Ga.
																														Rome, Ga.
																														Brunswick, Ga.
														1	1															Jacksonville, Fla.
		1																												Key West, Fla.
			1											2	3	1														Mobile, Ala.
									1					1																Vicksburg, Miss.
																														Columbus, Miss.
1		3	1	4				3				2		2	3	1	1	2												New Orleans, La.
														1					1					1						Shreveport, La.
														2																Baton Rouge, La.
																														Morgan City, La.
1						1										2		3	1											Galveston, Tex.
	1					1								1					1											Little Rock, Ark.
												1		1	1															Nashville, Tenn.
																														Murfreesboro, Tenn.
1			2			2								2	3															Memphis, Tenn.
																														Clarksville, Tenn.
				1				3	1					2	3			1	1							1				Louisville, Ky.
1		1	1	1		4		3		2		5		13	2			3						1						Cincinnati, Ohio.
3		3		3		1		1				1				4		1												Cleveland, Ohio.
								1						1																Dayton, Ohio.
																														Gallipolis, Ohio.
																														Portsmouth, Ohio.
																														East Saginaw, Mich.
																														Flint, Mich.
1								1		2				3										1						Indianapolis, Ind.
														2	1			1												Evansville, Ind.
																														Richmond, Ind.
16		3		19		2		5		1		5		21		1		10		1		1		4		13		1		Chicago, Ill.
				2								1																		Peoria, Ill.
1																														Aurora, Ill.
						1								1																Jacksonville, Ill.
																														Elgin, Ill.
																														Moline, Ill.
2				8								8		4		1		4				1		2						Milwaukee, Wis.
								2						1																Beloit, Wis.
																														Saint Paul, Minn.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 22, 1878—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Dubuque, Iowa	22,254	1	2.3													1					
Keokuk, Iowa	12,117	4	17.2																		
Saint Louis, Mo	350,522	134	19.9									42	7	7.3		6	2			9	3
Lawrence, Kans	8,500	1	6.0										1	6.0							
Omaha, Nebr	30,518	10	17.1									6		10.2						1	
Salt Lake City, Utah	20,708	5	12.5									1		2.5							
San Francisco, Cal	233,956	92	20.5									21		4.7		3		2		8	
Sacramento, Cal	21,420	9	21.9									1		2.4		1				3	
Los Angeles, Cal	11,311	5	23.0									2		9.2				1		1	
Vallejo, Cal	7,000	1	7.3																	1	
Boulder, Colo	3,030																				
Total	8,014,756	3,467	22.5									1,157	83			78	11	31	2	494	53

PROVIDENCE, R. I.—Dr. E. M. Snow, city registrar, sends the following report for the year 1880:

PROVIDENCE, *January* 10, 1881.

The following is a statement of the mortality in Providence during the year 1880, and the three years preceding:

	1880.	1879.	1878.	1877.
Whole number	2,080	2,026	1,989	1,938
SEX.				
Males	995	1,004	969	922
Females	1,085	1,022	1,020	1,016
CONDITION.				
Married	599	585	489	565
Single	1,190	1,166	1,251	1,135
Widows	188	178	169	164
Widowers	99	86	73	68
Divorced	4	1	7	6
COLOR.				
White	1,984	1,914	1,883	1,833
Colored	96	112	106	105
NATIVITY.				
United States	1,581	1,575	1,565	1,511
Ireland	346	334	312	292
England and Scotland	97	63	63	33
Germany	15	16	14	18
British America	26	27	29	22
Portugal and Western Islands	2	3	2	3
Other countries	13	3	4	9
PARENTAGE.				
American	920	941	889	903
Irish	827	776	794	719
English and Scotch	189	169	172	177
German	39	45	40	44
British American	61	49	50	52
Portuguese	16	22	21	16
Other foreign	28	24	28	22
AGES.				
Under one year	383	316	373	365
1 and under 2 years	146	145	174	141
2 and under 5 years	203	255	249	218
Total under 5 years	732	716	796	724
5 and under 10 years	135	174	138	131
10 and under 15 years	41	43	52	89
15 and under 20 years	52	49	63	51
20 and under 30 years	207	193	168	189
30 and under 40 years	169	164	163	156
40 and under 50 years	156	123	129	148
50 and under 60 years	148	152	145	136
60 and under 70 years	164	171	126	154
70 and under 80 years	174	149	141	149
80 and under 90 years	81	82	53	52
90 and over	21	10	15	9
SEASON.				
January	201	200	208	153
February	176	151	175	117
March	183	163	158	141
First quarter	560	514	541	411
April	191	167	164	157
May	189	152	131	160
June	153	120	128	123
Second quarter	533	439	423	440
SEASON—Continued.				
July	208	187	203	189
August	174	172	175	180
September	143	134	142	188
Third quarter	525	493	520	557
October	153	167	160	173
November	146	200	165	175
December	163	213	180	182
Fourth quarter	462	580	505	530
Whole year	2,080	2,026	1,989	1,938
CAUSES OF DEATH.				
Accidents	65	53	50	56
Apoplexy	47	57	42	50
Brain, congestion of	9	12	7	9
disease of	22	23	16	22
inflammation of	49	41	44	51
Bronchitis	36	34	47	44
Cancer	68	67	48	66
Childbirth	27	20	21	17
Cholera infantum	100	59	70	122
Cholera morbus	4	5	3	6
Consumption	322	293	304	294
Convulsions	49	59	56	33
Croup	29	43	38	40
Debility	13	23	26	16
Debility, premature birth	14	10	11	10
Diarrhœa	30	31	28	34
Diphtheria	61	107	246	295
Dropsy	8	4		5
Dysentery	12	9	11	21
Enteritis	19	16	18	21
Epilepsy	4	6	6	9
Erysipelas	9	10	7	7
Fever, typhoid	52	40	47	43
Heart, disease of	104	111	83	93
Hemorrhage	19	9	13	9
Hooping cough	11	15	44	16
Hydrocephalus	29	35	39	21
Insanity	8	12	17	6
Intemperance and delirium tremens	8	8	9	8
Kidneys, disease of	46	43	47	49
Liver, disease of	21	21	17	12
Malformation	11	9	22	16
Marasmus	34	28	40	57
Measles	3		51	
Meningitis, cerebro-spinal	4	7	7	
Old age	73	64	63	64
Paralysis	31	29	25	24
Peritonitis	14	15	16	10
Pneumonia	170	145	118	88
congestion of lungs	23	9	22	10
Rheumatism	11	11	5	7
Scarlatina	243	252	57	12
Scrofula	1	5	7	8
Small-pox				
Stomach, disease of	10	15	14	20
Suicide	2	6	7	12
Teething	16	13	7	7
Tuberculosis	9	20	16	20
Tumors	6	7	10	4
Other diseases	86	107	65	94
Unknown	18	8	22	6

In addition to the above deaths in 1880, there were 119 still-births, or 3 less than in 1879. Of the 119 still-born children, 75 were males, 44 females; 63 of American and 56 of foreign parentage.

The population of Providence, by the census of 1880, was 104,852.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 22, 1881—Continued.

Cities and States.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Dubuque, Iowa.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Keokuk, Iowa.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Saint Louis, Mo.	1	....	2	....	5	....	2	....	1	1	3	....	2	....	18	1	1	....	4	2	....	....	....	....	....	....	....	....	....	....
Lawrence, Kans.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
Omaha, Nebr.	1	....	....	....	3	....	....	....	....	....	....	....	2	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Salt Lake City, Utah.	....	....	2	....	1	....	....	....	5	....	1	....	2	....	2	....	1	....	1	....	....	....	....	....	1	....	5	....	....	....
San Francisco, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
Sacramento, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Los Angeles, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Vallejo, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boulder, Colo.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	99	3	40	7	197	3	37	....	60	6	24	2	124	....	329	50	32	3	121	11	3	....	21	2	45	5	71	3	18	2

so that the 2,980 deaths in the same year give as the rate of mortality 19.84 deaths in each 1,000 of the population, or one death in 50.41. In 1879 the rate was 19.57 in each 1,000, or 1 in 51.09. The average annual rate of mortality in Providence for twenty years past, with census of population and full returns of deaths, has been less than 20 in each thousand of the population.

During the year 1880 there were 1,343 persons vaccinated at the office of the superintendent of health, or 153 more than in 1879, and 1,370 certificates of vaccination were given to children to attend the public schools, or 75 less than in 1879. There has been no case of small-pox in Providence for several years past, and only one death from this disease since May, 1873, a period of seven years and eight months.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BROWNSVILLE, TEX.—Dr. C. B. Combe, inspector for the National Board of Health, writes, under date of January 13, that small-pox is still epidemic, but is decreasing under the general vaccination, isolation, and disinfection which have been used for some time. The surgeon in charge at Fort Brown has had but two cases among the troops, and has used all precautions to check the spread of the disease; only two cases have occurred among the American residents of Brownsville. The disease is almost confined to the poorer class of Mexicans, who suffer greatly in their wretched huts, or *jacals*, especially during the late cold weather. It is urged that rags sent from Brownsville to other parts of the United States be disinfected before shipment, as well as those from Matamoros.

From the official report from Matamoros it appears that there were 19 deaths from small-pox in October, 51 in November, and 73 in December.

HAVANA, CUBA.—During the week ending January 21 there were two deaths from yellow fever and 18 from small-pox. Only 8 deaths from yellow fever have been reported for the first three weeks of January.

NEW HAVEN, CONN.—The report of Dr. C. W. Chamberlain, of Hartford, secretary of the state board of health, is given for the last two months of 1880. The report indicates increased activity in sanitary matters in the principal cities, and improved conditions resulting. Diphtheria has prevailed extensively, but not of very fatal type; of scarlet fever no great number of cases have been reported. Typhoid fever has been unusually prevalent, especially among Swedish emigrants, and malarial fevers were common during their season. The general health of the State has not been as good during the year 1880 as in the two years preceding. Lung diseases have been more frequent, and local epidemics of typhoid fever and of diphtheria have appeared, while whooping cough and measles have prevailed through the whole State. Few children escaped the measles, and instances of second, and even of third attacks were not uncommon.

SAINT LOUIS, MO.—Dr. Charles W. Francis, health commissioner, reports, for the year 1880, a total of 6,635 deaths in a population of 350,522 (United States census), giving an annual death-rate of 18.9 per 1,000. The greatest mortality was during the summer months, being 2,031, against 1,418 for the winter months. Some of the principal causes of death were: cerebro-spinal meningitis 36, consumption 786, pneumonia 539, croup 61, diphtheria 113, scarlet fever 46, measles 55, typhoid fever 139, malarial fevers 241, whooping cough 79, puerperal 61, diarrhœal diseases 649, of which 488 were under 5 years of age. The deaths under that age were 44.26 per cent. of the total. There were 7,339 births and 1,181 marriages reported, but the returns were not complete.

The following reports for the week ending January 22, 1881, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; under 5 years, 1; consumption 1, croup 1, diphtheria 1, pneumonia 2. Allegheny, Pa., 78,000; deaths, 27; under 5 years, 10; accident 1, cerebro-spinal meningitis 1, consumption 6, diarrhœa 1, diphtheria 1, scarlet fever 2, pneumonia 5. Bath, Me., 8,000; deaths, 3; accident 1, old age 1. Belfast, Me., 5,308; deaths, 3; croup 1, diarrhœa 1, old age 1. Bowling Green, Ky., 6,000; deaths, 3; under 5 years, 2; pneumonia 2. Brattleborough, Vt., 6,000; no deaths. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years 1; consumption 1. Calais, Me., 6,162; consumption 1. Carrollton, Miss., 600; consumption 1. Chillicothe, Ohio, 11,000; deaths, 4; under 5 years, 1; consumption 2, pneumonia 1. Circleville, Ohio, 6,000; deaths, 4; under 5 years, 1; consumption 2, erysipelas 1. Columbus, Ga., 10,000; deaths, 9; under 5 years 2; consumption 1, scarlet fever 1, pneumonia 4. Corinth, Miss., 2,260; one death under 5 years. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,327; deaths, 7; under 5 years, 3; diarrhœa 2, pneumonia 3. Fayette, Miss., 400; no deaths. Gunn City, Mo., 125; no deaths. Hernando, Miss., 1,000; bronchitis 1. Huntingdon, Pa., 4,500; deaths, 2; under 5 years, 1. Huntingdon, Tenn., 1,200; no deaths. Indianola, Tex., 900; no deaths. Iuka, Miss., 1,000; no deaths. Jefferson, Tex., 3,250; no deaths. Kenosha, Wis., 5,500; deaths, 3; under 5 years, 1; diphtheria 1, pneumonia 1, old age 1. La Salle, Ill., 8,885; deaths, 2; under 5 years, 1; consumption 1, croup 1. Louisiana, Mo., 4,300; consumption 1. Madison, Ind., 9,000; deaths, 7; under 5 years, 2; congestion of lungs 1. Marquette, Mich., 4,040; deaths, 3; pneumonia 2. Martinsburg, W. Va., 6,854; old age 1. Meridian, Miss., 4,000; deaths, 2; under 5 years, 1; bronchitis 1. Milledgeville, Ga., 3,000; no deaths. Morton, Miss., 205; whooping cough 1, under 5 years. Mount Pleasant, Iowa, 4,500; one death, under 5 years. Muscatine, Iowa, 8,400; deaths, 6; under 5 years, 2; accident 1, scarlet fever 1, small-pox 1, diarrhœa 1. Muskegon, Mich., 11,300; deaths, 8; under 5 years, 1; consumption 3, diphtheria 1. Niles, Mich., 4,200; no deaths. Okolona, Miss., 2,000; deaths, 2; pneumonia 1. Painesville, Ohio, 5,500: deaths, 4; under 5 years, 3; croup 1, scarlet fever 1, congestion of lungs 1. Pass Christian, Miss., 2,000; one death, under 5 years of age. Pearlington, Miss., 1,200: no deaths. Phœnixville, Pa., 6,692; deaths, 2; consumption 1. Pleasant Hill, Miss., 233; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; puerperal 1. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; diphtheria 1. Rock Island, Ill., 12,000; deaths, 6; under 5 years, 1; cerebro-spinal meningitis 1, consumption 1, diphtheria 1, whooping cough 1. Santa Cruz, Cal., 5,000; deaths, 2; consumption 1, old age 1. Springfield, Ohio, 21,000; deaths, 11; under 5 years, 2; consumption 2, diphtheria 2. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; one death. Tuscaloosa, Ala., 4,000; no deaths. Watertown, Wis., 10,000; old age 1. Winchester, Va., 5,000; deaths, 2; typhoid fever 1. Winona, Minn., 10,000; deaths 2; under 5 years, 1; diarrhœa 1, puerperal 1. Youngstown, Ohio, 15,090; deaths, 7; under 5 years, 2; diarrhœa 1, diphtheria 1, erysipelas 1, malarial fever 1, bronchitis 1. Total population, 362,641; deaths under 5 years, 41; total number of deaths, 151; annual rate per 1,000, 21.7.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880–'81.															
France	Lyons	342,815	Jan. 1	163	24.8						10						5	
Do	Rouen	104,209	Jan. 15	54	26.9													
Holland	Amsterdam	316,952	Jan. 8	169	27.8								2				4	
Switzerland	Zurich	22,103	Jan. 8	6	15.1													
Germany	Barmen	95,000	Jan. 8	44	24.1												10	34.5
Do	Bremen	112,200	Jan. 1	41	18.9								1					
Do	Breslau	276,000	Jan. 1	136	25.6													37
Do	Brunswick	74,000	Jan. 8	29	20.4													34.7
Do	Cologne	144,537	Jan. 8	72	25.8								2				10	
Saxony	Chemnitz	101,115	Jan. 1	55	28.5												4	40
Belgium	Antwerp	173,643	Jan. 1	74	22.2					12	4	25	2			1		
Do	...do	173,643	Jan. 8	91	27.3					18	3	30	1			1	1	
Denmark	Copenhagen	235,254	Jan. 4	70	15.5					2		4	2			10		36.3
Italy	Rome	304,192	Dec. 25	204	34.9						17		3				8	49.1
Do	...do	304,192	Jan. 1	217	37.1						8		5				7	54.3
Austria	Vienna	728,534	Jan. 8	388	25.2						16		5				21	
Hungary	Buda-Pesth	344,604	Dec. 25	190	28.7						5		3				9	
Do	...do	344,604	Jan. 1	226	34.2						6		2				11	
Sweden	Stockholm	169,429	Jan. 1	99	31.6								3				16	39.9
Spain	Seville	138,000	Dec. 19	93	35.2										2		9	50
Do	...do	138,000	Dec. 26	88	33.3										3		7	51.8
Do	...do	138,000	Jan. 2	72	28.2												8	53.6
Do	...do	138,000	Jan. 9	89	32.9										2		12	48.2
Do	Malaga	115,882	Jan. 9	75	29.3						5							45
Barbary	Tripoli	20,000	Dec. 25	8	20.9													64.8
Do	...do	20,000	Jan. 1	13	33.9													65.2
Do	...do	20,000	Jan. 8	12	31.3													63.5
Egypt	Alexandria	220,000	Jan. 1	177	42.0													
Cape Colony	Cape Town	35,000	Dec. 27	19	28.3													78
China	Shanghai	2,197	Dec. 21	2	52.2													36.5
India	Calcutta	429,535	Dec. 18	348	42.2	22							13				1	65.8
Japan	Kobe	18,232	Dec. 25	19	54.2													
Canada	Port Sarnia	4,000	Jan. 29	2	26.1							1	1					
Cuba	Havana	195,437	Jan. 15	126	33.6				2		12		1					75
Hayti	Aux Cayes	9,000	Jan. 1	5	29.0													75
Do	...do	9,000	Jan. 8	2	11.6													75
Do	Port-au-Prince	30,000	Jan. 5	13	22.6													85
Do	...do	30,000	Jan. 12	23	40.0													84
Guadaloupe	Point-a-Pitre	22,919	Dec. 26	50	113.8				2									
British Honduras	Belize	4,000	Dec. 4		39.													81.5
Do	...do	4,000	Dec. 11	2	26.1													80.5
Do	...do	4,000	Dec. 18		52.2													74.1
Do	...do	4,000	Dec. 25		91.3													79
Do	...do	4,000	Jan. 1	6	78.2													77.1
West Indies	St. Thomas	1,500	Jan. 14	15	52.2						1							
Mexico	Matamoros	16,000	Jan. 15	25	81.5					300	14							
Do	Acapulco	3,500	Jan. 2	6	89.5													83
Do	...do	3,500	Jan. 9	6	89.5													84
Do	...do	3,500	Dec. 18	1	14.9													83
Do	...do	3,500	Dec. 25															84
Brazil	Rio de Janeiro	330,000	Jan. 1	183	28.9				3		4		1				6	
St. Helena	Jamestown	6,241	Dec. 25	1	8.4													78.6
Do	...do	6,241	Jan. 1	5	41.8													78.1
Teneriffe	Santa Cruz	16,610	Dec. 4	14	44.4							1	1					66.6
Do	...do	16,610	Dec. 11	16	50.2													68.6
Do	...do	16,610	Dec. 18	13	40.8													64.2
Do	...do	16,610	Dec. 25	8	25.1													65
Ireland	Queenstown	10,000	Jan. 15	3	15.7													
Do	Belfast	230,000	Jan. 13	98	22.2								2					
Scotland	Dundee	155,100	Jan. 8	79	25.8					1	1					11		35.7
Do	Leith	59,958	Jan. 8	28	24.3												6	36.6
Do	...do	59,958	Jan. 15	30	26.0												5	26.9
England	London	3,707,130	Jan. 8	1,510	21.3						33		7				146	38.4
Do	Bristol and Clifton	217,000	Jan. 8	132	24.3								3				10	38
Do	Bradford	197,196	Jan. 8	64	16.4												6	
Wales	Cardiff	82,364	Jan. 15	30	18.9													32.5

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, FEBRUARY 12, 1881. [No. 33.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

PROPOSED SANITARY LEGISLATION IN WEST VIRGINIA.

SENATE BILL NO. 35.

A bill to establish a State board of health and vital statistics, and regulating the practice of medicine and surgery.

Be it enacted by the legislature of West Virginia: [SEC. 1.] The governor shall appoint, within sixty (60) days from and after the passage of this act, two physicians from each Congressional district, who shall be graduates of respectable medical colleges, and of not less than twelve (12) years continuous practice in their profession, and have distinguished themselves by attention to the study of sanitary science, who shall constitute the State board of health.

The terms of office of the persons so appointed shall be so arranged that the terms of two of them shall expire at the end of every second year. Vacancies in the board shall be filled, by re-appointment or otherwise, by the same appointing power.

SEC. 2. The board so appointed shall take the oath of office prescribed by the constitution for other State officers, and receive from the secretary of state certificates of their appointment.

SEC. 3. The board shall meet within twenty (20) days after receiving notice of their appointment, at such time and place as the first-named member of the board shall designate; and shall organize by the election of a president and secretary from their own number, who shall occupy such positions until their successors are elected; and they may adopt all necessary rules, regulations, and other articles for the dispatch of business. A majority of the board shall constitute a quorum; and they are authorized to send either the secretary or president, or a special committee of the board, to consult and cooperate with the National Board of Health, the State boards of health of other States, or other sanitary organizations, whenever they may deem it necessary for the public good.

SEC. 4. The secretary shall be the executive officer of the board; shall superintend and perform the work prescribed in this act, and perform such other duties as the board shall direct; shall respond to all communications of the local boards of health, hereinafter provided for, and give such instructions as may be deemed necessary; and in case of the prevalence of endemics, epidemics, infectious and contagious diseases, or other unusual sickness, he shall visit the locality and adopt such regulations for its suppression as may seem best. He shall annually report to the governor on or before the first day of January the investigations, discoveries, and recommendations of the board, which shall be printed and distributed as soon as practicable thereafter, in the same manner as other public documents of the State.

SEC. 5. The board shall take cognizance of the interests of life and health among the inhabitants of the State; shall make or cause to be made sanitary investigations and inquiries respecting the causes of diseases, especially of endemics and epidemics and the means of prevention; the sources of mortality, and the effects of localities, employments, habits, and circumstances of life on the public health. They shall also investigate the causes of diseases occurring among the stock or domestic animals in the State, the methods of remedying the same; and shall gather information in respect to these matters and kindred subjects for diffusion among the people. They shall also, when requested, advise with regard to the location, drainage, water supply, heating, and ventilation of public buildings, the ventilation of coal mines, and the drainage and sewerage of towns and cities.

When they may believe there is a probability that any infections or contagious disease will invade this State from any other State, it shall be their duty to take such action and adopt and enforce such rules as they may in the exercise of their discretion deem efficient in preventing the introduction and spread of such disease or diseases. The better to accomplish such objects, the board are empowered and directed to establish and strictly maintain quarantine at such places as they deem proper, and may adopt rules and regulations to obstruct and prevent the introduction or spread of infectious or contagious diseases to or within the State. They may enforce inspections of persons and articles of baggage or other goods of whatsoever character, as well as the purification of the same; that all companies or individuals operating or controlling railroads, steamboats, coaches, public conveyances and steamers plying the Ohio River or its tributaries in this State, shall obey the rules and regulations when made and published by the State board of health; and any owner or owners, person or persons, having charge of any railway train, passenger coach, steamboat, or public or private conveyance, who shall refuse to obey such rules and regulations when made and published shall be held to have committed a misdemeanor, and for each offense shall be punished by a fine not less than fifty ($50) dollars, nor more than five hundred ($500) dollars, or be confined in the county jail not less than fifteen (15) days nor more than two (2) months, or be either so fined or imprisoned, or both, in the discretion of the court or jury trying the case, to be recovered in any court of competent criminal or penal jurisdiction.

SEC. 6. It shall be the duty of the State board of health to appoint three (3) persons, one of whom, at least, shall be a legally qualified practicing physician, citizens residing in each county of this State, who shall constitute a *local board of health* for the respective counties in which they reside, and such persons, as members of the local board, shall hold their office for the term of two (2) years from the date of their appointment; and such local boards are empowered, and it shall be their duty to inaugurate and execute, and require the heads of families to execute, such sanitary regulations as the local board may consider necessary to prevent the outbreak and spread of cholera, small-pox, scarlet fever, diphtheria, and other endemic, epidemic, infectious, and contagious diseases; and they are empowered to go upon and inspect any premises which they may believe are in an unclean or infectious condition; and the said local board are authorized to enforce the rules and regulations of the State board of health. And it shall be the duty of physicians practicing in any county in which a local board is organized, to report promptly all or any of the above-named character of diseases under their special treatment to such local board; and such local board shall make report of the same to the State board of health at least once in every three (3) months—first, of the character of the infectious, contagious, endemic or epidemic disease prevailing in their county; second, the number of persons reported as infected with such disease; third, the action taken by such local board to arrest the progress of such prevalent disease, and the visible effects of such action. The said local board shall receive such compensation for their services as the county court in its discretion determine.

The provisions for local boards of health shall not apply to cities and towns having boards of health, but where such local boards of health are already established in cities and towns, they shall be auxiliary to, and act in harmony with, the State board of health, and shall be required to enforce a system of registration of vital statistics, as hereinafter provided, and shall report the same to the State board of health within the first three (3) days of each month.

SEC. 7. In the counties bordering on the Ohio River and its tributaries, on the State line separating West Virginia from the State of Ken-

tucky, the local boards of health are empowered to declare quarantine in said county or counties, or in any particular place or places therein, against the introduction of any contagious or infectious diseases prevailing in any other State or county: *Provided*, That as soon as such quarantine is established the local board declaring the same through its presiding or chief officer shall, in writing, notify the State board of health of such quarantine and the extent thereof, and thereupon the State board of health, in the exercise of its supervising power over local boards, shall, as early as practicable, ascertain the necessity of such quarantine, and shall either approve of and enforce the said quarantine or declare the same raised.

SEC. 8. The State board of health and its agents, employés, or the local boards of health, acting under the direction and regulations of the State board, when they have reasonable grounds to believe that any packet or other steamboat, barge, or other water craft navigating the Ohio River or its tributaries, is infected with any infectious or contagious disease, are empowered to prevent the landing of such craft at any point on the West Virginia shore; and they are also empowered, when they have reasonable grounds to believe that any such railway train, coach, or other vehicle contains persons or goods, of whatsoever character, infected with contagious matter, to detain at any station or point on such railway or road such train, coach, or vehicle, for a time sufficient to disinfect and purify the same: *Provided*, Quarantine has been established at such station or place by action of such boards; and any railway conductor or person in charge of the same who shall willfully avoid or prevent the inspection, disinfection, and purification of the conveyances above named in his control shall be guilty of a misdemeanor and liable to the penalty hereinbefore mentioned, to be recovered in the court of any county where the offense has been committed.

SEC. 9. The State board of health shall have supervision of a system of registration of marriages, births, and deaths, and have charge of the vital and mortuary statistics of the State; and all physicians, coroners, and midwives shall be required to report to the clerk of the county in which they reside all necessary information, as shall be required of them by the State board of health, pertaining to all births and deaths coming under their supervision or notice, such reports to be made within ten (10) days from the date of their occurrence. The clerk in each county shall keep in his office two books, one of which shall be known as the register of births, the other to be known as the register of deaths, which books shall have suitable columns for the entry of all facts required by the State board of health. The said registry of births shall record the time of birth, the name of the father, the maiden name of the mother, the place of birth of the parents, the place of present residence of the parents, the occupation of the father, the sex and color of the child, and the fact of its being born alive or dead. In case two or more persons shall have attended at any such birth, the physician or midwife last in attendance shall furnish the certificate of birth, and shall make return of the same within ten (10) days to the clerk of the county. In the absence of such physician, surgeon, or midwife, the father or mother of the child shall make such return and be alike responsible therefor. Any person failing to comply with the terms of this section shall suffer and pay a fine of not less than five (5) dollars nor more than ten (10) dollars for each offense.

SEC. 10. Within thirty-six (36) hours from the time of death of any person within the limits of this State, and before the removal of the body for interment, the undertaker or other person having charge of the same shall obtain from the physician who had charge of the case, or, in the absence of a physician, from the family of the deceased, or housekeeper where the death occurred, all the facts connected with the said death, and shall certify as to said death the name, age, sex, color, occupation, place of birth, the exact locality of the place of death, the cause of death, the duration of the disease, the physician, surgeon, or midwife in attendance, and the fact of being married or single. On the first Monday of each month, every undertaker or other person who shall have taken charge of the interment of the body of any such person shall make report in writing to the clerk of his county of the number of interments under his charge during the preceding month, and the time and place of burial. The penalty for violation of this section shall be a fine of ten (10) dollars for each offense.

SEC. 11. It shall be the duty of the State board of health to prepare and provide such blank forms for the record of all marriages, births, and deaths; the said printed forms and registry books to be provided by the county clerk, at the expense of the counties; and it shall also be the duty of recorders to make record of all returns from physicians, midwives, and undertakers in the aforementioned books, and to furnish physicians, midwives, and undertakers with printed blanks for report concerning all matters required by the State board of health.

SEC. 12. Any person practicing medicine in any of its departments shall possess the qualifications required by this act, viz: If a graduate in medicine, he shall present a diploma to the two members of the State board of health in his congressional district for verification as to its genuineness. If the diploma is found to be genuine and issued by a reputable medical college, and recognized as such an institution by the State board of health, and if the person named therein be the person claiming and presenting the same, the said two members of the State board of health shall issue a certificate to that effect; and such diploma and certificate shall be conclusive as to the right of the lawful holders of the same to practice medicine in the State of West Virginia. If not a graduate of such medical college as above designated, every person practicing medicine in this State shall present himself before the two members of the State board of health in his congressional district and submit himself to such examination as the said district members shall require; and if the examination be satisfactory they shall issue a certificate in accordance with the facts, and the lawful holder of such certificate shall be entitled to all the rights and privileges herein mentioned, except that physicians who have been engaged in the continuous practice of medicine in this State for more than ten years at the date of the passage of this act shall, in lieu of a diploma or examination by the members of the State board of health, present to the said board an affidavit as to the number of years they have been engaged in the practice of medicine, and the said board shall issue its certificate to such physicians without requiring an examination, but this section shall not apply to members of the Medical Society of the State of West Virginia. The members of the State board of health in each congressional district shall give not less than 10 days public notice of the time and place of their meetings, in order to accommodate applicants for certificates.

SEC. 13. Every person holding a certificate from the State board of health shall have it recorded in a book kept for that purpose by the clerks of the county courts in the several counties in the State, and the record indorsed thereon. Any person removing to another county to practice shall procure an indorsement to that effect on the certificate from the said clerk of the county, and shall record the certificate in like manner in the county to which he removes. The fee of the clerk for recording a certificate issued by the State board of health to enable a holder to practice medicine shall be one dollar.

SEC. 14. Each candidate, on presenting himself for examination, shall pay a fee of ten dollars, which shall be returned to him if a certificate be refused. In case an applicant for a certificate fails to pass a satisfactory examination, the person may, in three months thereafter, appear again before the board for a second examination, which second examination shall be final. If said second examination shall be satisfactory to the board, a certificate shall be given, for which the candidate shall pay ten dollars.

SEC. 15. Examination may be, in whole or in part, in writing, and shall be of an elementary and practical character, and shall embrace the general subjects of anatomy, physiology, chemistry, materia medica, pathology, pathological anatomy, surgery, and obstetrics, but sufficiently strict to test the qualifications of the candidate as a practitioner of medicine, surgery, and obstetrics. This section shall not apply to females practicing midwifery at the passage of this bill.

SEC. 16. The State board of health may refuse certificates to individuals guilty of unprofessional or dishonorable conduct, and they may revoke certificates for like causes.

SEC. 17. Any person shall be regarded as practicing medicine, within the meaning of this act, who shall profess publicly to be a physician, and to prescribe for the sick, or who shall append to his name the letters "M. D." This act shall also apply to apothecaries and pharmacists, and other persons who prescribe for the sick. This act shall not apply to commissioned officers of the United States Army and Navy and Marine Hospital services.

SEC. 18. Any itinerant vender of any drug, nostrum, ointment, or appliance of any kind intended for the treatment of disease or injury, or who shall, by writing or printing, or any other method, publicly profess to cure or treat diseases, injuries, or deformities, by any drug, nostrum, manipulation, or other expedient, shall pay to the State treasurer a special tax of $100 for each and every month.

SEC. 19. Any person practicing medicine, surgery, or obstetrics in this State, without complying with provisions of this act, shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars, or by imprisonment in the county jail for a period of not less than thirty days nor more than one year, or by both such fine and imprisonment, for each and every offense; and any person filing or attempting to file as his own the diploma or certificate of another, or a forged affidavit of identification, shall be guilty of a felony, and upon conviction shall be subject to such fine and imprisonment as are made and provided by the statutes of this State for the crime of forgery.

SEC. 20. The secretary of the State board of health shall receive a salary which shall be fixed by the board; he shall also receive his traveling and other expenses incurred in the performance of his official duties. The other members of the board shall receive no compensation other than their traveling and other expenses while employed on business of the board. The president and secretary of the board shall certify all bills ordered to be paid by the board. Such bills shall, on warrant of the auditor, be paid by the State treasurer.

SEC. 21. All sums of money received by the State board of health in payment for certificates of authority to practice medicine, and all fines and special taxes, collected through and by reason of this act, shall be paid into the State treasury.

SEC. 22. The sum of fifteen hundred dollars, or so much thereof as may be necessary, is hereby appropriated to pay the salary of the secretary, and to meet all the contingent expenses of the officers of the board, traveling and other expenditures of the members of the board in the performance of their duties, and shall not exceed the sum appropriated.

ABSTRACTS FROM CONSULAR REPORTS.

BERMUDA.—United States Consul C. M. Allen reports, under date of January 11, that the general health of the islands is good, but a fever of typhoid character prevails to some extent, and chiefly among the military. In the 99th regiment this fever is especially noted, and has assumed a more malignant type than among the civilians.

DUBLIN, IRELAND.—The official report for the week ending January 8 gives an annual death-rate of 29.8 per 1,000, for 16 of the principal towns. The lowest rate was 8.2, in Kilkenny, and the highest 60.1 in Waterford. In Dublin the rate was 31.7. No epidemic disease is reported from any part of the country.

FOOCHOW, CHINA.—The reports of United States Consul J. C. Wingate show that no epidemic or contagious disease has prevailed in this city during the month of December. The native city remains in its former unsanitary condition, but the foreign settlement is said to be well kept and healthy.

GASPÉ BASIN, QUEBEC.—Under date of January 26, United States Consul G. H. Holt reports this locality remarkably free from zymotic diseases until the past five weeks. During this time about 50 cases of scarlet fever have occurred, with 2 deaths. Nine deaths from diphtheria are also reported, out of 30 cases, on the shores of Gaspé Bay.

GUAYMAS, MEX.—Under date of December 31, United States Consul A. M. Ward reports that the general health of the city has been remarkably good, and a decrease in the infant mortality is especially observed during the past month.

LONDON, ENGLAND.—The report of the registrar-general for the week ending January 8 shows an average death-rate of 21.3 for 20 of the larger English towns, having an aggregate population of about seven and a half millions. The death-rate for the same week and for an equal population in the United States, was 23.5 per 1,000. But in making any comparison between the mortality of England and that of the United States, it is important to observe the effect of our vast range of climate, and the large proportion of colored population in our country. In England the conditions of race, climate, and occupation are more homogeneous than here, and under such circumstances a lower death-rate is to be expected.

Small-pox is noted as increasing in London, the deaths from that disease being 33 for the week. No deaths from typhus fever, and only 10 from typhoid fever are recorded.

MALTA AND GOZO.—United States Consul C. B. Eynaud reports 181 deaths for the two weeks ending December 15; annual death-rate 30 per 1,000. Five deaths were caused by typhoid fever, 1 by typhus fever, and 4 by diphtheria. Mean temperature, 62°.

MOSCOW, RUSSIA.—United States Consul A. Weber sends a report for the month of October, showing a mortality of 1,602, in a population of 601,970; annual death-rate, 31.3 per 1,000; mean temperature, 34°. Among the causes of death noted there were 13 from small-pox; 81 from typhoid fever; 441 from diseases of the respiratory organs, and 147 from diarrhœal diseases.

NASSAU, BAHAMAS.—The reports of the United States consul, up to January 15, show that the town and vicinity are remarkably free from disease. About sixty American tourists and invalids have sought refuge there from the severe cold of our winter, and many of them have come from Florida, where the weather has been remarkably cold for that latitude.

NINGPO, CHINA.—The reports of United States Consul E. C. Lord, from November 20 to December 4, state that dysentery and typhoid fever had prevailed during the month, but the health of the city was improving with the advent of dry and cool weather. Mean temperature about 54°.

PANAMA.—United States Consul J. M. Wilson, under date of January 15, states that no reliable information can be obtained as to deaths and diseases. There were 10 deaths reported for the week, giving an annual death-rate of 43.5 per 1,000; no contagious diseases are noted, and malarial fevers are the prevailing diseases.

PARIS, FRANCE.—The United States consul forwards weekly bulletins, issued by Dr. Bertillon, the medical officer in charge of statistics. The latest reports are for the three weeks ending January 13. One of the principal subjects of notice is the increased mortality among infants, and especially from diseases of the digestive organs. Such increase does not belong to the season, and the cause is assigned to the increasing practice of confiding children to the care of hired nurses, and in more than half of such cases the parents make an express stipulation that the child shall not be fed from the breast. Dr. Bertillon regards this as being in effect infanticide, since the mortality observed is chiefly among the children so deprived of their natural food. The charts of the city given with each weekly bulletin exhibit the distribution of deaths from the principal zymotic diseases with great simplicity and clearness.

SANTIAGO DE CUBA.—This port is stated to be free from contagious diseases up to December 31. United States Consul J. C. Landreau says that the only cases of yellow fever that have occurred have been among the Spanish troops. Clean bills of health are issued.

SINGAPORE.—United States Consul A. G. Studer reports his district free from epidemic or contagious diseases up to December 27, 1880.

TUXPAN, MEX.—Dr. A. M. Boyd, under date of January 1, reports 32 deaths during the month of December. Among the causes noted are: consumption 1, bronchitis 1, pneumonia 5, diarrhœa 1, dysentery 2, malarial fevers 6, puerperal 1, and 3 from accidents. No contagious or epidemic disease has been observed during the year. Total number of deaths reported during the year, 281; annual death-rate, 39.1 per 1,000.

VIENNA, AUSTRIA.—United States Consul J. R. Weaver reports for the year 1880 that the civil population of the city was estimated at 707,532 by a special census taken in January of that year. The troops, numbering about 18,000, are not included. Deaths in the city during the year, 17,744, being at the annual rate of 24.5 per 1,000. Births reported, 28,610, of which 12,720 were illegitimate. Of still-births 1,342 are recorded. Among the causes of death noted are: consumption, 4,901; other lung diseases, 2,246; small-pox, 528; diphtheria, 456; scarlet fever, 174; typhoid fever, 171; whooping cough, 146; and measles, 102. The deaths under one year were 2,755, and from one to five years 528.

MISSISSIPPI RIVER INSPECTION.

The superintendent of the New Orleans *Anchor Line* writes as follows, in reply to a letter from Dr. R. M. Mitchell:

SAINT LOUIS, *November* 9, 1880.

SIR: Your letter of the 8th instant, asking my views on the subject for the purpose specified in your letter of October 28, as follows, has been received:

1st. Has the river inspection service of National Board of Health been of any advantage of benefit to the interests I represent, &c.?

2d. Is it desirable simply for business considerations aside from the the health question that the service be continued another year, &c.?

In reply I take pleasure in saying: 1st. All steamboat interests south of Saint Louis know that the confidence felt throughout the Mississippi Valley in the supervision and certificate system of the National Board of Health has been of signal benefit in preventing panic and local quarantine on several occasions during the past summer, which has been of immense benefit both to the steamboat interest as well as the shippers. 2d. I have no hesitation in asserting that we believe it to be the duty of the National Board of Health to continue its inspection service, not only next season but every season until the Mississippi Valley is no longer liable to the visitation of yellow fever. This assertion, I think, expresses the opinion of every steamboat manager of the Mississippi River.

Respectfully,

(Signed) JAMES O'NEAL,
Superintendent.

R. M. MITCHELL,
Director of Inspection Service,
National Board of Health, Memphis, Tenn.

ADULTERATION OF FOOD AND DRUGS.

At a regular meeting of the Chamber of Commerce of New York, held on Thursday, February 3, the president, Samuel D. Babcock, in the chair, the following resolutions, offered by Mr. Henry C. Meyer, and seconded by Mr. Daniel C. Robbins, were unanimously adopted:

Resolved, That this chamber approves the bill entitled "A bill to prevent the adulteration of food and drugs," which has recently been prepared by a committee of experts under the direction of the National Board of Trade, and which has received the indorsement of that body and been introduced in Congress.

Resolved, That this chamber respectfully urges upon Congress the early consideration of this important measure.

Resolved, That the secretary is hereby directed to send copies of these resolutions to the committees in Congress to whom this bill has been referred.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 29, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	9	13.9			9						1								3	
Concord, N. H	13,838	9	34.9			9						1				1					
Burlington, Vt	11,364	3	13.8	11,248	116	3				1,285										1	
Boston, Mass	362,535	169	24.3			165	4					56	2			7		1		32	1
Cambridge, Mass	52,740	27	26.5			27						10						1		6	
Edgartown, Mass	1,301																				
New Bedford, Mass	26,875	11	21.4			11						3				1				1	
Newburyport, Mass	13,537	4	15.4			4						1									
Marblehead, Mass	7,467	3	21.0	7,451	16	3						1									
Plymouth, Mass	7,094	1	7.4			1															
Fall River, Mass	49,006	15	16.0			15						8								2	
Lowell, Mass	59,485	18	15.8	59,307	178	18						3								2	
Lawrence, Mass	39,178	11	14.7			11												1		3	
Worcester, Mass	58,295	24	21.5			24						10						3		2	
Lynn, Mass	38,284	10	13.6			10						4								1	
Brockton, Mass	13,608	9	34.5			9						2								1	
Holyoke, Mass	21,851	6	14.3			6						2				2				1	
Bridgewater, Mass	3,620	2	28.9	3,600	20	2															
Milford, Mass	9,230	4	22.4			4						1								1	
Chicopee, Mass	11,325	7	32.2			7						3						2		1	
Fitchburgh, Mass	12,405	8	33.6			8						1				1				1	
Somerville, Mass	24,985	6	12.5			6						4									
Springfield, Mass	33,340	16	25.0			16						6				1				1	
Spencer, Mass	7,466	4	28.0			4						3									
Quincy, Mass	10,529	2	10.0			2						2									
Northampton, Mass	12,172	4	20.5			4															
North Adams, Mass	10,192	2	10.3			2														1	
Haverhill, Mass	18,475	6	16.9			6						2						1			
Gloucester, Mass	19,329	4	10.9			4						3						1			
Chelsea, Mass	21,785	12	28.6			12						5				1				3	
Clinton, Mass	8,030	2	13.4			2						1								1	
Beverly, Mass	8,445	2	12.0			2														1	
Attleborough, Mass	11,109	6	27.8			6						3						1		1	
Malden, Mass	12,017	6	26.2			6						3									
Salem, Mass	27,500	8	15.1			8						2								2	
Taunton, Mass	21,200	9	21.7			9						5								1	
Webster, Mass	5,696	3	27.0			3						1									
Westboro', Mass	5,217																				
Woburn, Mass	10,982	3	14.4			3						2									
Weymouth, Mass	10,571	6	29.0			6						2								2	
Waltham, Mass	11,711	3	13.2			3														1	
Providence, R. I	104,852	40	19.9	101,052	3,800	34	6	17.5	102.4			6	1							6	3
New Haven, Conn	62,882	20	16.6			19	1					4	1							4	
New Britain, Conn	13,978	5	18.7			5						2								1	
Waterbury, Conn	20,269	10	25.7			10						3								4	
Fairfield, Conn	3,748			3,500	248																
New York, N. Y	1,206,507	707	30.5	1,186,144	20,433	695	12	30.5	30.6			225				22		13		105	
Brooklyn, N. Y	566,689	227	20.9			219	8					88	4			8	1			32	
Yonkers, N. Y	18,892	7	19.3			7						3								1	
Poughkeepsie, N. Y	20,207	10	25.8			10														2	
Newburgh, N. Y	18,050	4	11.6			4						2									
Buffalo, N. Y	155,137	41	13.8			41						16				2				5	
Cambridge, N. Y	1,850			1,800	50																
Hudson County, N. J	187,950	70	19.4									28				2				7	
Newark, N. J	136,400	58	22.2			55	3					22	1							9	
Orange, N. J	13,206	3	11.9			3						1								1	
Camden, N. J	41,714	15	18.8			11	4					4								3	1
Plainfield, N. J	8,126	4	26.1									2								1	
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	402	24.8	815,182	31,798	391	11	25.0	18.0			130						3		61	3
Pittsburgh, Pa	156,381	57	19.0	152,290	4,091	53	4	17.1	52.1			26	1							6	
Erie, Pa	27,730	9	16.9			9						4								4	
Wilmington, Del	42,499	22	27.0			14	8					4	5							2	2
Baltimore, Md	332,190	135	21.2			110	25					39				2	1			18	9
District of Columbia	180,000	70	20.2	120,000	60,000	39	31	16.9	26.9			7	13				2			9	5
Norfolk, Va	21,966	7	16.7			1	6						1				1				
Lynchburg, Va	15,959	15	49.0			6	9					1	3					1	2	1	1
Charleston, S. C	50,000	21	21.9	22,713	27,277	9	12	20.6	22.7											4	4
Augusta, Ga	23,023	6	13.6			3	3					2	1								1
Atlanta, Ga	38,000	19	25.9	22,000	16,000	10	9	23.7	29.5			3	1				1			1	2
Savannah, Ga	30,681	29	49.3													1					
Rome, Ga	5,000	2	20.9									1								1	
Brunswick, Ga	2,900	2	35.0	1,500	1,400	1	1	34.8	37.3			1	1								
Key West, Fla	12,000	2	8.7	8,000	4,000	1	1	6.5	13.1				1								
Mobile, Ala	31,295	12	20.1										1							2	
Columbus, Miss	5,510			2,740	2,670																
Vicksburg, Miss	11,814	7	30.9			2	5					1									1
New Orleans, La	216,140	142	34.3	158,000	57,000	95	47	31.1	42.8			28	14			5	3			11	10
Shreveport, La	11,017	4	18.9			1	3														1
Morgan City, La	2,018	2	50.4			1	1														
Baton Rouge, La	7,187	3	21.8	2,954	4,233		3		37.0				1								
Waco, Tex	8,000	3	19.6	5,000	3,000	3		31.3												1	
Galveston, Tex	22,253	19	44.9			19						4	3							1	2
Little Rock, Ark	13,185	7	27.7			5	2					1	2								
Nashville, Tenn	43,461	27	32.4	27,875	15,669	12	15	22.0	49.5			1	6			2				4	2
Memphis, Tenn	34,000	32	49.7	17,293	16,707	14	18	42.2	56.2			4	5			1		1		3	1
Clarksville, Tenn	7,200			4,000	3,200																
Murfreesboro', Tenn	3,800	1	13.8	2,000	1,800	1		26.1													
Louisville, Ky	123,625	56	23.6			41	15					11	5					1		9	5
Cincinnati, Ohio	255,708	95	19.4			93	2					25				6				16	1
Cleveland, Ohio	160,140	52	17.0													1				4	
Gallipolis, Ohio	4,500	1	11.6			1						1									
Dayton, Ohio	38,677	9	12.1			9						2								3	
Portsmouth, Ohio	11,314	6	27.7			6						3								1	
Indianapolis, Ind	75,074	22	15.3			22						5				3				2	
Richmond, Ind	12,743	3	12.3			3						2									

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 29, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Evansville, Ind	29,280	9	16.0			7	2					5				1	1				1
Chicago, Ill	503,304	215	22.3			215						100				5		1		18	
Peoria, Ill	29,315	10	17.8									2								1	
Aurora, Ill	11,825	2	8.8													1					
Jacksonville, Ill	10,927	5	23.9			3	2					1	1					1			1
Elgin, Ill	8,770	2	11.9			2						1								1	
Moline, Ill	8,000	3	19.6			3															
Anna, Ill		2				2						1				1					
Rock Island, Ill	12,000	2	8.8			2												1			
Milwaukee, Wis	115,578	53	23.8									25								4	
Beloit, Wis	5,180	1	10.1	5,000	180	1															
Saint Paul, Minn	41,498	16	25.1																		
East Saginaw, Mich	19,016	6	16.5			16						2									
Flint, Mich	9,000	2	11.6			2															
Dubuque, Iowa	22,254	4	9.4			4															
Keokuk, Iowa	12,117	4	17.2			4						1								1	
Davenport, Iowa	23,000	2	4.6			2						1				1					
Saint Louis, Mo	350,522	133	16.8			124	9					48	4			4				21	
Omaha, Nebr	30,518	6	10.3			6						3								1	
Lawrence, Kans	8,500	7	42.1	6,800	1,700	3	4					2	1								1
Boulder, Colo	3,030																				
Salt Lake City, Utah	20,768	12	30.1			12						9									
Sacramento, Cal	21,420	3	7.3			3															
Los Angeles, Cal	11,311	5	23.1			5						1						1		2	
Total	7,910,509	3,480	21.9									1,065	79			79	10	36	3	468	58

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BROWNSVILLE, TEX.—The report for the month of December shows 26 deaths from small-pox. Dr. C. B. Combe forwards reports for October and November, stating that the deaths from small-pox were 14 in the first and only 4 in the second of those months. The increase in December seems to show a rapid spread of the disease during that month.

JACKSONVILLE, FLA.—Dr. A. W. Knight, health officer, sends a report of mortality for the last six months of 1880. The United States census of that year gives a population of 8,000, and the number of deaths being 116, the annual rate was 14.5 per 1,000. The white population is estimated at 5,000; number of deaths, 61; annual rate, 12.2. Colored population, 3,000; number of deaths, 55; annual rate, 18.3. Deducting 16 deaths of non-residents, the proper annual death-rate of the city is reduced to 12.5 per 1,000. The meteorological statistics are omitted here, in view of the full discussion of the climate of Florida, contributed by Dr. C. J. Kenworthy, and published in No. 30 of the BULLETIN. Among the principal causes of death noted during the six months were: consumption, 15; other lung diseases, 3; croup, 1; diarrhœal diseases, 16. Of the deaths from fever, 15 out of 17 were of ordinary malarial character, 3 from typhoid and 3 from typho-malarial fevers.

LYNCHBURG, VA.—Dr. Thos. L. Walker, president of the local board of health, forwards the following statistics for the year 1879: Deaths from all causes, 438; annual rate 20.9, as estimated at that time, when the population was supposed to be 21,000. By the census of 1880 the population was 15,960, and on that basis the death-rate for 1879 would be about 27.4 per 1,000. Deaths under 5 years, 182, or 41.6 per cent. of total mortality. As to races, the population was estimated at 10,000 white and 11,000 colored; it was therefore nearly equally divided, but the deaths were 136 white to 302 colored, showing at least twice as high a death-rate among the colored people as compared with the white.

NEW YORK CITY.—Dr. John T. Nagle, deputy registrar of records, presents a table showing the total number of still-births and deaths, with a statement of some of the principal causes of death during the seventy-five years ending December 31, 1880; also the number of births and marriages reported since 1847. The population of the city was estimated by the United States census at 33,131 in 1790, and at 1,206,577 in 1880. Some notable fluctuations are observed in the reported death-rate, which is placed at 44.4 per 1,000 for 1832, at 45.6 for 1849, at 42.5 for 1854, while the rate for other years seldom rises to 30, and was noted as low as 17.5 in 1814. The annual increase of population for the years intervening between the regular decennial census of the United States was estimated by taking one-tenth of the total increase of the city for the ten years and adding that number for each year. In 1875 the figures of the State census were used, and the population of the city was then estimated at 1,041,886.

PEORIA, ILL.—Dr. J. N. Niglas, health officer, sends a report for the year 1880, showing a total of 514 deaths. The population being 29,315 (by United States census), the death-rate was 17.5 per 1,000. Among the causes of death were: typhus fever 2, typhoid 22, typho-malarial 3, malarial 7, scarlet fever 60, diphtheria 40, measles 6, whooping cough 9, erysipelas 2, diseases of the brain and nervous system 48, of the heart 16, diarrhœal diseases 48, consumption 57, other lung diseases 21, puerperal 6, accidents 25. There were 18 still-births, which should not be included in the total of deaths; deducting these, the death-rate was 16.9 per 1,000. The number of births recorded was 674, of which only 5 were colored; annual birth-rate 22.8 per 1,000. The highest number of deaths per month was 55, in November; the lowest 32, in March. It is also noted that of the 514 interments, 39 were of bodies sent to the city for burial; deducting these and the 18 still-births, the proper mortality of the city is reduced to 457, and the death-rate to 15.6 per 1,000

SALEM, FAUQUIER COUNTY, VA.—Under date of January 26, Dr. F. Horner, jr., reports three fatal cases of diphtheria in the family of a clergyman. A fourth child was convalescent, with complete loss of power in the lower limbs. In the fatal cases there was gangrene of the tissues in the pharynx, with copious discharge from the nasal passages. Various treatment was tried, without any benefit. In these cases, the origin was clearly traced to contagion from a negro child which had at first been supposed to be affected with simple inflammation of the throat.

SAN ANTONIO, TEX.—Dr. R. Menger, city physician, reports, under date of January 26, that measles have been introduced from New Orleans; only one case had proved fatal. Most of the colored people and Mexicans had either had small-pox or had been vaccinated, so that the disease had not spread among the citizens. Some deaths from consumption had occurred among visitors already affected with that disease; but the general health of the city is good.

WEBSTER, MASS.—Dr. F. A. Bosworth, under date of January 30, states that this town has a population of 5,684, according to the census of 1880. Burial permits are required, and forms are supplied for registration, which are said to be faithfully filled by those required by law to do so.

A communication from New Orleans, dated January 24, contains the following information:

An important meeting of the New Orleans Medical and Surgical Association was held last night, Dr. Davidson presiding, and Dr. M. Levy, secretary. There were present representatives of the Chamber of Commerce, Auxiliary Sanitary Association, State board of health, the several railroads, and some of the steamship companies.

These gentlemen had been invited to participate in the discussion of a report on the subject of quarantine.

The committee appointed by the Medical and Surgical Association to make suggestions with regard to quarantine submitted a report,

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JANUARY 29, 1881—Continued.

Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Cities and States.
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	2	....	....	....	....	....	....	....	....	....	....	1	....	Evansville, Ind.
10	....	4	....	11	....	....	....	2	....	4	....	7	....	20	....	4	....	12	....	....	....	2	....	6	....	4	....	....	....	Chicago, Ill.
2	....	....	....	2	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Peoria, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Aurora, Ill.
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....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Elgin, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	Moline, Ill.
....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Anna, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Rock Island, Ill.
1	....	....	....	3	....	....	....	....	....	1	....	11	....	3	....	1	....	1	....	....	....	....	....	2	....	....	....	....	....	Milwaukee, Wis.
....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Beloit, Wis.
1	....	....	....	....	....	....	....	1	....	....	....	....	....	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Saint Paul, Minn.
....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	East Saginaw, Mich.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Flint, Mich.
1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Dubuque, Iowa.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Keokuk, Iowa.
....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Davenport, Iowa.
1	....	1	....	3	....	....	....	1	....	3	....	2	....	20	6	3	....	1	3	....	....	1	....	3	....	....	....	....	....	Saint Louis, Mo.
1	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	Omaha, Nebr.
....	....	....	....	1	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	Lawrence, Kans.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Boulder, Colo.
2	....	....	....	1	....	1	....	....	....	....	....	....	....	3	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	Salt Lake City, Utah.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Sacramento, Cal.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Los Angeles, Cal.
114	4	53	2	156	4	30	....	46	2	26	6	144	2	236	39	35	4	115	12	1	....	17	1	53	1	63	5	11	3	

of which the principal features are as follows: The committee is of opinion that "the responsibility of keeping infectious diseases entirely out of the Mississippi River should devolve upon the national government, as being the only power capable of exercising such supervision as would be satisfactory to all interested communities."

The committee suggest: First. That quarantine shall consist of the detention, for purposes of disinfection, fumigation, and purification, of all vessels from ports in which yellow fever usually prevails, or from ports where other contagious or infectious diseases are reported to exist.

SEC. 2. All vessels from infected ports shall be detained at quarantine station for purposes specified above, for such length of time as the proper authorities may determine.

SEC. 3. In case any contagious disease prevails as an epidemic at the port from which the vessel sailed, or has touched during the voyage, or on any vessel with which she has come in contact, the detention at quarantine shall not be less than five days from date of exposure.

SEC. 4. Free *pratique* to be allowed to vessels which have not sailed from infected places.

Section 5 defines what is meant by an "infected" vessel and infected persons.

Section 6 describes the arrangement of merchandise into three classes for sanitary purposes.

Section 7 recommends the appointment of an inspector of the National Board of Health at Eadsport, to prohibit the entrance into the Mississippi of dangerously-infected vessels, and to order the same to Ship Island quarantine.

Section 8 advises that a resident representative of the National Board be allowed access to the meetings and records of the local board in an advisory capacity.

Section 9 provides that when a case of yellow fever shall occur a board of experts be appointed, composed of the resident member of the National Board, the president of the local board, and a local practitioner, said physician to be appointed by the National Board. A majority report from the experts shall be binding, and no dissenting opinion shall be published. Their final decision shall at once be reported to the National Board in cipher.

The report is signed by D. C. Holliday, M. D.; J. P. Davidson, M. D.; John del Orto, M. D.; Samuel Logan, M. D.; Thomas Layton, M. D.; F. Loeber, M. D.

Sections 1, 2, 3, and 4 were adopted without opposition. Natives of places where yellow fever is epidemic were excluded from the effect of section 5.

There was considerable discussion on section 6.

Among the railroad representatives a resolution was adopted authorizing the appointment of a committee of five to confer with the railroad managers and form a schedule of articles of merchandise subject to quarantine.

Sections 7 and 8 were opposed by Mr. Booth, of the State board, and Dr. Tebault had objections to section 9. The entire report was, however, unanimously adopted. Copies of it will be sent to members of Congress, and printed for general distribution.

The following reports for the week ending January 29, 1881, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 5; under 5 years, 2; consumption 1, croup 1, pneumonia 1. Allegheny, Pa., 78,000; deaths, 31; under 5 years, 13; consumption 3, diphtheria 3, scarlet fever 3, congestion of lungs 1, bronchitis 2, measles 2. Bath, Me., 8,000; death, 1; under 5 years, 1. Belfast, Me., 6,308; deaths, 3; under 5 years, 1; consumption 1. Brattleborough, Vt., 6,000; death, 1; gastric fever 1. Calais, Me., 6,162; death, 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 2; under 5 years, 1; accident 1. Circleville, Ohio, 5,996; deaths, 3; pneumonia 1, old age 2. Clinton, Mich., 1,200; no deaths. Columbus, Ga., 10,000; deaths, 9; under 5 years, 4; consumption 1, scarlet fever 1, pneumonia 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,327; deaths, 10; under 5 years, 2; cerebro-spinal meningitis 3, consumption 1, diarrhœa 2, pneumonia 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Franklin, Tenn.; deaths 2; consumption 1, pneumonia, 1. Galesburg, Ill., 11,500; deaths, 2; enteric fever 1. Helena, Mont., 3,630; deaths, 3; under 5 years, 3; diphtheria 1, congestion of lungs 1. Hernando, Miss., 1,000; death, 1. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; deaths, 3; scarlet fever 2, old age 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 4; under 5 years, 1; diarrhœa 1, pneumonia 1, puerperal 1. Louisiana, Mo., 5,200; death, 1; pneumonia 1. Marquette, Mich., 4,000; death, 1; consumption 1. Martinsburg, W. Va., 6,384; deaths, 2; consumption 1, puerperal 1. Milledgeville, Ga., 3,000; deaths, 5; consumption 3, pneumonia 1. Monmouth, Ill., 6,000; deaths, 2; diphtheria 1, pneumonia 1. Mount Pleasant, Iowa, 4,500; death, 1. Muscatine, Iowa, 8,412; deaths, 3; consumption 1, scarlet fever 1, small-pox 1. Muskegon, Mich., 11,300; deaths, 2; consumption 2. Niles, Mich., 4,200; deaths, 2; consumption 1, bronchitis 1. Painesville, Ohio, 5,504; deaths, 2; enteric fever 1. Pass Christian, Miss., 2,000; death, 1; consumption 1. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; deaths, 2; under 5 years, 1; croup 1. Port Gibson, Miss., 1,200; death, 1. Port Royal, S. C., 750; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, Cal., 5,000; death, 1. Springfield, Ohio, 21,000; deaths, 3; under 5 years, 1; pneumonia 1. Starkville, Miss., 1,454; death, 1; spinal meningitis 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; no deaths. Tuscaloosa, Ala., 2,000; no deaths. Watertown, Wis., 10,000; deaths, 2; under 5 years, 1; diphtheria 1. Winchester, Va., 5,000; no deaths. Winona, Minn., 10,000; death, 1; under 5 years, 1; bronchitis 1. Youngstown, Ohio, 15,089; deaths, 2; enteritis 1. Total population, 343,897; deaths under 5 years, 31; total number of deaths, 117; annual rate per 1,000, 17.7.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880–'81.															
Canada	Kingston	13,000	Jan. 22	1	3.3													11.1
Do	do	13,000	Jan. 29	8	26.1													7.5
Bermuda	Hamilton	14,867	Jan. 25	4	14.0							12	1					65.5
Do	do	14,867	Feb. 1	3	10.5							8	1					61
Cuba	Havana	195,437	Jan. 22	129	34.4				2		18		1					75
Aspinwall	Colon	2,500	Jan. 22	3	62.7													85
U. S. of Colombia	Panama	12,000	Jan. 25	5	21.7			5	1	6						15	4	80
Mexico	Matamoros	16,000	Jan. 22	19	62.0					300	14							
Brazil	Rio de Janeiro	330,000	Jan. 8	176	27.8				5		3		1				6	
Azores	Horta-Fayal	7,630	Nov. 27	1	6.8													62
Do	do	7,630	Dec. 4	5	34.2													61
Do	do	7,630	Dec. 11	1	6.8													62
Do	do	7,630	Dec. 18	5	34.2													63
Ireland	Queenstown	10,000	Jan. 22	8	41.7													
Do	Belfast	174,412	Jan. 15	127	37.9								1				8	30.6
Do	Dublin	333,401	Jan. 15	224	34.9						1		2		2			25.6
Scotland	Dundee	155,100	Jan. 15	68	22.9											10		25.9
England	London	3,707,130	Jan. 15	1,604	20.9						27		10				141	28
Do	Newcastle	148,000	Jan. 15	47	16.0												1	28
Do	Bristol	217,000	Jan. 15	129	25.2								1				12	27.8
Do	Bradford	197,196	Jan. 15	132	21.0												3	
Do	Tunstall	27,775	Jan. 15	14	26.2													29.6
Do	do	27,775	Jan. 22	21	39.3													26.3
Do	Sheffield	304,938	Jan. 1	110	18.8													28
Do	do	304,938	Jan. 8	111	19.0													27.8
Do	do	304,938	Jan. 15	133	22.2													27.7
Wales	Cardiff	82,364	Jan. 22	43	27.2												2	24.8
France	Rouen	104,209	Jan. 22	39	19.4													
Do	Lyons	342,815	Jan. 8	162	24.7						11						8	
Switzerland	Geneva	50,066	Dec. 25	11	11.1												3	
Do	do	50,066	Jan. 1	23	23.1										1			
Do	do	50,066	Jan. 8	16	16.2													
Do	do	50,066	Jan. 15	20	20.2													
Do	Basle	65,101	Jan. 15	28	22.5										1		4	
Holland	Amsterdam	316,952	Jan. 15	179	29.5								2		1		6	26
Do	Rotterdam	148,102	Jan. 15	89	30.9								1			57	2	
Germany	Berlin	1,096,644	Jan. 8	492	23.3							14	8	5		167	84	35.6
Do	Bremen	112,200	Jan. 8	42	19.9												3	
Do	Barmen	95,000	Jan. 15	40	21.9												5	45.2
Do	Brunswick	74,000	Jan. 15	27	19.0										1			46.6
Do	Mannheim	53,500	Jan. 15	19	19.5													40.8
Do	do	53,500	Jan. 22	14	14.3													43.7
Do	Cologne	144,537	Jan. 15	76	27.3												8	
Do	Frankfort	137,000	Jan. 8	35	13.4												1	35
Do	Breslau	276,000	Jan. 8	152	28.7								1				14	35.8
Belgium	Brussels	406,638	Jan. 15	210	26.9						1		5				9	
Saxony	Leipsic	149,000	Jan. 15	68	23.7												2	48.6
Do	Chemnitz	100,341	Jan. 8	52	27.0												3	26
Denmark	Copenhagen	235,254	Jan. 4	15	25.5							6	1			15		37
Italy	Genoa	185,000	Jan. 15	92	26.0													37.4
Roumania	Bucharest	177,646	Jan. 8	12	32.8						2		8				8	
Do	do	177,646	Jan. 15	97	28.5						1		3				13	
Russian Poland	Warsaw	357,169	Jan. 1	125	18.3						1							38.5
Do	do	357,169	Jan. 8	102	23.						1							36.2
Norway	Christiania	120,000	Jan. 8	33	13.8							11				13	3	41
Portugal	Oporto	108,346	Dec. 11	84	40.4						2		1					46.7
Do	Lisbon	225,152	Dec. 11	131	30.3								3					46
Spain	Malaga	115,882	Jan. 15	76	34.2						7							
Do	Cadiz	65,028	Jan. 15	34	27.													61.2
Morocco	Tangier	15,000	Dec. 25	13	45.					4								50.5
Do	do	15,000	Jan. 1	14	48.													53.1
Do	do	15,000	Jan. 8	17	39.													54.5
Barbary	Tripoli	20,000	Jan. 15	8	20.													63.5
Africa	Algiers	68,055	Jan. 7	82	61.								4				2	
Cape Colony	Cape Town	35,000	Jan. 3	23	34.													85
Seychelle Islands	Mahé	12,000	Dec. 4	3	13.0													
Do	do	12,000	Dec. 11	5	21.													
Do	do	12,000	Dec. 18	3	13.0													
Do	do	12,000	Dec. 25		4.													

SAPELO QUARANTINE STATION.

At a meeting of the city council of Savannah, Ga., held February 3, 1881, the following communication was read:

OFFICE BOARD SANITARY COMMISSIONERS,
Savannah, January 31, 1881.

To the honorable Mayor and Aldermen, city of Savannah, Ga.:

GENTLEMEN: I have the honor to transmit the following resolution, which was passed at the regular meeting of the board held this day:

Resolved, That the board of sanitary commissioners of Savannah do reaffirm their previous action indorsing the National Maritime Quarantine, located on Black Beard Island, and known as the Sapelo Quarantine Station, and respectfully recommend to the city council to urge upon our Senators and Representatives in Congress the early appropriation of such sum as may be necessary for the erection of proper buildings, and the complete equipment of said station.

Your obedient servant,

J. T. McFARLAND,
Secretary of the Board of Sanitary Commissioners and Health Officer.

The resolution was adopted and the mayor requested to communicate the action of council to our Senators and Representatives in Congress.

The following resolutions presented at the eighth annual meeting of the American Public Health Association at New Orleans, December 10, 1880, by Dr. D. W. Hand, of Minnesota, are communicated by Dr. Azel Ames, secretary of the American Public Health Association.

Resolved, That the contagiousness of diphtheria is now well established; that that disease should, in all cases, be treated with the same rigorous isolation and quarantine that is everywhere enforced against small-pox.

Resolved, That as we know little or nothing of the origin of diphtheria, we will request the National Board of Health to continue its investigation of this disease.

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Investigations upon the matter above referred to have been made and are still in progress, under the charge of Drs. H. C. Wood and H. F. Formad.

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Dr. J. L. Carter, health officer of Dallas, Tex., in a communication of February 3, 1881, states that in Dallas and its suburbs some cases of cerebro-spinal meningitis have occurred; that 8 deaths had occurred, one of them in the hospital. Two weeks have elapsed since the first case. Some cases apparently yield to treatment, and some cases are very mild."

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES—Continued.

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	310	0.86	3.84	355	0.98	4.08	90	0.25	1.03	120	0.33	1.38	57	0.16	0.65	48	0.13	0.55	56	0.13	0.64	236
Southeast	37	0.37	1.62	47	0.47	2.07	74	0.73	3.25	31	0.31	1.36	8	0.08	0.35	9	0.09	0.39	29	0.29	1.27	3
Northwest	71	0.68	3.11	81	0.77	3.55	34	0.32	1.49	47	0.45	2.06	11	0.10	0.48	14	0.13	0.61	28	0.27	1.22	17

Distribution of diseases.—In the Northeast section the most marked changes since December are the reduction of deaths from malarial fevers from 0.20 to 0.13 per 1,000, and of enteric fever from 0.40 to 0.33. Diphtheria and croup have each fallen 10 per cent., but measles are increasing, though still giving only 0.16 deaths per 1,000 per annum.

In the Southeast the fall of scarlet fever from a rate of 0.57 to 0.47 per 1,000 is chiefly due to the absence of two reports from Baltimore, which city furnishes most of the deaths from this disease and from diphtheria in the Southeast section. Enteric and malarial fevers and whooping-cough are decreasing; diphtheria and croup also show a reduction of 30 per cent. each.

The Northwest section exhibits the same general decline in deaths from the zymotic diseases. The mortality from acute lung diseases has increased 14 per cent., as compared with 34 per cent. for the Southeast, while it has remained unchanged in the Northeast section.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysis are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

Whereas the presence of yellow fever at Vera Cruz, Mexico; Rio de Janeiro, Brazil; Havana, Cuba; island of St. Thomas and other tropical ports, renders it liable by importation to our principal seaport, New Orleans;

Therefore, be it ordained by the mayor and aldermen of the city of Vicksburg, Miss., that from and after the fifteenth day of May next [illegible] boat or other watercraft coming from below will be [illegible] at the city of Vicksburg, discharge freight or put off passengers, [illegible] shall have a certificate from a sanitary inspector of the National Board of Health, that he has complied with the inspection and [illegible] of said board.

VICKSBURG, MISS., *February* 12, 1881.

[illegible] meeting of the board of mayor and aldermen held on [illegible] the following resolution was adopted, to wit:

[illegible] National Board of Health is hereby earnestly [illegible] the inspection of steamboats and other [illegible] and the city of New Orleans by the [illegible] copy of the above ordinance [illegible] National Board of Health at [illegible]

T. J. BIRCHETT, *Mayor*.

QUARANTINE REPORTS.

SHIP ISLAND STATION.—Dr. S. H. Collins, inspector, forwards weekly reports from November 27 to January 1. The arrivals were 7 during that period: 6 barks and 1 brigantine. None of the vessels were detained, as no disease was found.

NOTICE.

The attention of health officers and others who fill the weekly reports of mortality in cities of the United States, is especially invited to the change of form in the cards, and in the table compiled from them. In the column for the number of deaths, white and colored, those places only will hereafter be noted whose reports are definitely known to separate the diseases and the deaths of the two races, and which can furnish the respective populations. All populations not agreeing with those previously given have been changed in accordance with the figures furnished by the Census Bureau, and remain subject to correction from that office.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

MORTALITY IN CITIES AND TOWNS OF THE UNITED STATES FOR THE YEAR 1880.

States and cities.	Population.	Deaths under 5 years.	Annual death-rate under 5 years.	Total number of deaths.	Representing an annual rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.
Me ..... Portland	33,810	207	6.1	707	20.9	135	26	67	16	1	1	81	.....	38	1	2	.....	4
N. H..... Concord	13,838	56	4.0	254	18.4	39	11	14	13	8	1	4	.....	35	2	2	.....	3
Vt..... Burlington	11,364	95	8.4	209	18.4	37	3	28	9	3	.....	.....	.....	14	.....	1	.....	5
Mass .... Boston	362,535	3,426	9.5	8,634	23.5	1,469	170	1,003	607	156	6	33	.....	991	51	88	1	95
Cambridge	52,740	366	7.0	964	18.3	163	18	112	38	7	.....	5	.....	117	4	9	.....	6
New Bedford	26,875	227	8.5	626	23.3	80	11	68	45	7	2	48	.....	40	.....	6	.....	1
Newburyport	13,537	78	5.8	288	21.2	58	5	11	12	2	4	12	.....	20	.....	4	.....	1
Marblehead	7,467	72	9.6	202	27.0	37	3	10	57	1	1	.....	.....	18	.....	.....	.....	.....
Lowell	59,485	620	10.4	1,329	22.4	225	30	186	23	21	.....	17	.....	149	17	6	1	12
Lawrence	39,178	325	8.3	739	18.8	144	10	75	16	26	1	6	.....	61	18	6	.....	2
Lynn	38,284	298	7.8	780	20.4	115	12	65	71	23	3	3	.....	92	.....	4	.....	3
Brockton	13,608	75	5.5	219	16.1	43	2	15	10	9	.....	.....	.....	12	.....	1	.....	2
Chicopee	11,325	61	5.4	182	13.9	40	6	19	11	2	1	.....	.....	15	3	4	.....	.....
Fitchburgh	12,405	90	7.3	228	18.4	41	6	19	9	6	.....	4	.....	19	1	1	.....	3
Worcester	58,295	429	7.4	1,214	20.8	147	10	155	17	33	5	38	.....	156	3	31	14	18
Milford	9,310	29	3.1	151	16.2	28	3	13	3	6	3	.....	.....	13	.....	1	.....	1
Plymouth	7,094	29	4.1	142	20.0	17	3	9	6	.....	.....	3	.....	8	1	1	.....	.....
Somerville	24,985	170	6.9	429	17.2	68	7	58	20	8	1	5	.....	54	1	3	.....	.....
Springfield	33,340	216	6.5	583	17.5	93	8	45	29	3	2	11	.....	38	4	5	.....	.....
R. I ..... Providence	104,850	722	6.9	2,098	20.0	298	41	147	65	50	1	249	.....	250	6	28	.....	11
Conn .... New Haven	62,882	426	6.8	1,165	18.5	155	28	81	37	23	34	5	.....	119	19	16	.....	17
N. Y.... New York	1,206,577	14,652	12.1	32,245	26.7	4,741	873	3,942	1,422	244	466	620	1	4,645	490	416	30	281
Brooklyn	566,689	6,780	12.0	13,576	24.0	1,807	414	2,003	1,134	67	250	250	.....	1,771	178	164	3	114
Yonkers	18,892	109	5.8	271	14.3	58	7	32	2	3	6	1	.....	49	.....	.....	.....	3
Poughkeepsie	20,207	106	5.2	373	18.5	69	1	22	1	12	2	1	.....	51	.....	.....	.....	2
Utica	33,913	141	4.2	502	14.8	83	2	34	7	6	7	1	.....	54	4	10	1	15
Newburgh	18,050	100	5.5	301	16.7	40	11	18	4	3	6	3	.....	38	.....	1	.....	7
N. J ..... Hudson County	187,950	1,872	9.9	4,372	20.6	502	123	349	113	52	71	134	.....	468	19	193	.....	4
Newark	136,400	1,156	8.5	2,925	21.4	410	88	164	100	56	57	9	.....	273	.....	14	.....	3
Pa ..... Philadelphia	846,980	6,520	7.7	17,701	20.9	2,692	280	960	424	495	16	268	.....	1,003	107	22	424	95
Pittsburgh	156,381	1,638	10.5	3,457	22.1	318	31	269	347	197	7	227	.....	375	90	14	.....	103
Erie	27,730	200	7.2	474	17.1	73	7	24	41	9	7	17	.....	56	.....	14	.....	11
Md ..... Baltimore	332,190	3,677	11.4	8,216	24.7	1,243	161	938	320	199	83	408	.....	498	.....	47	1	147
District of Columbia	180,000	1,929	10.7	3,120	17.3	760	77	335	101	74	120	25	.....	529	.....	47	17	42
Va ..... Norfolk	21,966	351	16.0	781	35.5	91	4	90	71	13	54	7	.....	68	3	2	.....	.....
Richmond	63,803	833	13.0	1,759	27.6	283	6	181	14	40	19	3	.....	87	3	23	.....	37
N. C ..... Wilmington	17,361	155	8.9	349	20.1	34	1	25	12	3	14	2	.....	20	1	9	.....	7
S. C..... Charleston	50,000	650	13.0	1,595	31.9	236	4	108	10	60	19	.....	.....	143	2	9	.....	28
Ga ..... Savannah	30,681	442	14.4	1,002	32.6	135	7	74	21	16	32	.....	.....	91	.....	13	.....	7
Augusta	23,023	230	10.0	571	24.8	74	9	90	13	4	29	1	.....	61	.....	5	.....	6
Atlanta	37,541	305	8.1	724	19.3	105	7	94	6	36	5	.....	.....	72	9	10	.....	8
Fla ..... Jacksonville	8,000	72	9.0	227	28.4	54	2	34	.....	7	25	.....	.....	12	7	5	.....	1
Ala ..... Mobile	31,205	217	6.9	762	24.4	128	6	49	3	13	34	.....	.....	46	.....	8	.....	2
Selma	7,505	88	11.7	201	26.8	34	.....	16	2	6	26	.....	.....	25	.....	3	.....	9
Miss ..... Vicksburg	11,814	100	8.5	339	28.7	51	3	17	2	6	32	1	.....	13	1	2	.....	4
La ..... New Orleans	216,140	1,946	9.0	5,631	24.2	845	35	426	85	52	332	54	2	370	104	28	1	70
Shreveport	11,017	83	7.5	213	19.3	26	.....	13	.....	6	35	.....	.....	14	2	2	.....	4
Tex ..... San Antonio	20,561	172	8.4	446	21.7	75	2	62	3	10	22	.....	.....	30	5	9	2	6
Ark ..... Little Rock	13,185	163	12.4	381	28.9	48	4	53	.....	6	35	5	.....	51	9	2	.....	8
Tenn .... Nashville	43,461	342	7.9	1,014	23.3	143	8	107	5	59	8	9	.....	83	.....	6	.....	57
Ky ..... Louisville	123,625	1,098	8.9	2,618	21.2	411	23	145	19	80	35	29	.....	209	36	15	1	81
Ohio .... Cincinnati	255,708	2,217	8.7	5,331	20.9	738	35	450	108	93	10	137	.....	517	100	31	.....	88
Cleveland	160,140	.....	.....	3,260	20.4	217	82	308	203	56	26	292	.....	202	8	33	.....	33
Dayton	38,677	222	5.7	593	15.3	85	8	56	31	13	6	7	.....	53	.....	9	.....	7
Gallipolis	4,500	22	5.0	76	16.9	11	4	3	1	2	1	2	.....	9	3	2	.....	.....
Ind ..... Indianapolis	75,074	715	9.5	1,571	20.9	168	25	134	48	63	45	70	.....	197	20	16	.....	32
Evansville	29,280	273	9.3	633	21.4	89	8	57	14	43	75	29	.....	73	26	8	.....	5
Richmond	12,743	92	7.2	220	17.3	37	10	20	4	5	7	7	.....	23	.....	2	.....	10
Ill ..... Chicago	503,304	5,656	11.2	10,469	20.8	848	432	1,273	956	153	81	341	.....	1,110	131	90	42	69
Wis ..... Milwaukee	115,578	1,376	11.9	2,491	21.5	200	69	168	181	35	18	107	.....	183	17	36	.....	6
Minn .... Saint Paul	41,498	298	7.2	711	17.1	74	9	85	36	34	.....	5	.....	58	2	4	.....	4
Iowa..... Keokuk	12,117	62	5.1	180	14.9	30	2	8	2	1	1	29	.....	13	4	1	.....	2
Mo ..... Saint Louis	350,522	2,952	8.4	6,725	19.2	784	58	646	118	131	236	55	.....	604	52	61	.....	79
Kans .... Lawrence	8,500	65	7.7	152	17.9	25	4	14	23	1	12	.....	.....	16	.....	.....	.....	3
Nebr .... Omaha	30,518	214	7.0	449	14.7	38	9	99	34	28	18	15	.....	67	6	5	.....	6
Utah .... Salt Lake City	20,768	194	9.3	424	20.4	21	22	19	114	12	.....	1	.....	39	4	6	.....	1
Cal ..... San Francisco	233,956	1,354	5.8	4,518	19.3	788	25	178	48	85	35	16	.....	509	26	45	28	27
Vallejo	7,000	26	3.7	83	11.9	7	3	10	.....	2	.....	.....	.....	16	1	2	.....	2
Total	7,359,937	69,884	9.7	165,175	22.4	22,861	3,414	16,402	7,287	2,986	2,491	3,612	3	17,144	1,601	1,663	566	1,720

NOTE.—The above table is compiled from weekly reports to the National Board of Health, for the 52 weeks from January 3, 1880 to January 1, 1881. The figures will, therefore, differ from those of annual reports of cities, made out for the 12 calendar months. The populations used in the table are those given by the tenth United States census, so far as they have been furnished.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

NOTICE.—The authorities of all cities supplied with the new form of postal card recently adopted by the National Board of Health are requested to return any remaining cards of the old form, and to fill up the new forms as completely as possible.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 5, 1881.

Cities and States.	Total population according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	9	13.9			9						1								1	
Bangor, Me	16,857	3	9.3			3						1									
Concord, N. H	14,000	4	15.1			4						1									
Burlington, Vt	11,364	3	13.8	11,248	116	3															
Boston, Mass	362,535	194	28.0			190	4					66	2			5				26	2
Cambridge, Mass	52,740	22	21.6			22						10								5	
Edgartown, Mass	1,301																				
New Bedford, Mass	26,875	13	25.2			13														2	
Newburyport, Mass	13,537	5	19.3																	1	
Marblehead, Mass	7,467	4	28.0	7,451	16	4						1								1	
Plymouth, Mass	7,094																				
Fall River, Mass	49,006	26	27.0			26						11								3	
Lowell, Mass	59,485	22	19.3	59,313	172	22						6								5	
Lawrence, Mass	39,178	13	17.3			13						3						1		4	
Worcester, Mass	58,295	27	24.1													2		1		3	
Lynn, Mass	38,284	17	23.2									8								1	
Pittsfield, Mass	13,367	2	7.8			2															
Brockton, Mass	13,608	5	19.2			5						4									
Holyoke, Mass	21,851	5	11.9			5						1						1		2	
Bridgewater, Mass	3,620																				
Chicopee, Mass	11,325																				
Fitchburgh, Mass	12,405	4	16.8			4														1	
Somerville, Mass	24,985	14	29.2			14						5								3	
Springfield, Mass	33,340	24	37.6									9				2				3	
Spencer, Mass	7,466	2	13.9			2															
Quincy, Mass	10,529	4	20.1			4						2								1	
Northampton, Mass	12,172	4	17.2			4						1									
North Adams, Mass	10,192	6	31.8			6						1									
Haverhill, Mass	18,475	7	19.7									5						1		1	
Gloucester, Mass	19,329	13	35.4									8								2	
Chelsea, Mass	21,785	9	21.5			8	1						1							2	1
Clinton, Mass	8,030	4	26.1			4														1	
Beverly, Mass	8,445	2	12.0			2														1	
Attleborough, Mass	11,109	4	18.5			4															
Malden, Mass	12,017	3	13.1			3						2									
Salem, Mass	27,500	9	17.0			9						3				1				3	
Westboro', Mass	21,200	1	10.0			1														1	
Woburn, Mass	10,982	6	28.6			6						3								1	
Taunton, Mass	21,200	10	24.1			10						1								2	
Weymouth, Mass	10,571	2	9.7			2														1	
Waltham, Mass	11,711	6	26.5			6						1								1	
Webster, Mass	5,696																				
Westfield, Mass	7,700	4	27.7																		
Providence, R. I	104,850	43	21.4	101,052	3,800	42	1	21.7	13.7			13				1				11	1
New Haven, Conn	62,882	22	18.2			22						5								5	
New Britain, Conn	13,978	4	14.9			4						3									
Waterbury, Conn	20,269	4	10.3			4						1									
Fairfield, Conn	3,750	1	1.5	3,500	250	1															
New York, N. Y	1,206,577	718	31.0	1,186,144	20,433	709	9	31.1	23.0			296				17		6		117	
Brooklyn, N. Y	566,689	247	22.7			246	1					90	1			3				38	
Yonkers, N. Y	18,892	6	16.6			6														3	
Poughkeepsie, N. Y	20,207	12	31.0			12						3								1	
Newburgh, N. Y	18,050	12	34.7			12														4	
Utica, N. Y	33,913	7	10.8			7						2								2	
Buffalo, N. Y	155,137	51	17.2			51						13				2				9	
Cambridge, N. Y	1,850			1,800	50																
Seneca Falls, N. Y	6,000	4	31.8			4														1	
Little Falls, N. Y	6,940	1	7.6			1															
Hudson County, N. J	187,950	74	20.5									30				2				6	
Newark, N. J	136,400	66	25.2			61	2					31								10	
Orange, N. J	13,206	4	15.8			3	1						1								
Camden, N. J	41,714	14	17.5			12	2					4	1							4	
Plainfield, N. J	8,126	1	6.5			1														1	
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	405	24.9	815,182	31,798	388	17	24.8	27.9			123				6				54	4
Pittsburgh, Pa	156,381	78	26.0	152,290	4,091	74	4	25.3	52.1			30	2			6				9	
Erie, Pa	27,730	8	15.1									1								1	
Wilmington, Del	42,499	19	23.3			9	10					3	5							2	1
Baltimore, Md	332,190	179	28.1	278,487	53,703	133	46	24.9	44.7			60				4		1	1	12	6
District of Columbia	180,000	92	26.6	122,000	60,000	47	45	20.4	39.0			12	22					2		6	11
Richmond, Va	63,803	43	35.2	37,970	26,697	17	26	18.9	52.9			2	8							4	5
Lynchburg, Va	16,500	7	22.9			4	3					1	2								
Charleston, S. C	50,000	38	39.6	22,713	27,287	11	27	25.5	51.3			2	7					1			8
Augusta, Ga	23,023	17	37.8			6	11					3	4			1	1			1	
Atlanta, Ga	37,421	14	19.3	21,086	16,335	5	9	12.2	28.6			1	4							2	
Savannah, Ga	30,681	16	27.2	15,007	15,674	5	11	17.4	35.3			4	2							2	1
Brunswick, Ga	2,900	1	18.0	1,500	1,400	1		34.8				1									
Rome, Ga	5,000	1	10.4			1															
Jacksonville, Fla	8,000	3	19.6	5,000	3,000	3		31.3												2	
Mobile, Ala	31,265	15	19.8	16,927	14,368	6	9	18.5	32.7				3							2	2
Columbus, Miss	5,230	1	9.9	2,760	2,590		1		20.3				1								
Vicksburg, Miss	12,500	8	35.3			4	4											1	1		
New Orleans, La	216,410	112	27.0	159,178	57,231	68	42	22.3	38.3			20	17							1	1
Shreveport, La	11,017	6	28.4			4	2						1							2	
Baton Rouge, La	7,187	2	14.6	2,954	4,233	1	1	17.7	12.3				1							1	
San Antonio, Tex	20,797	4	10.3			4							1							1	
Galveston, Tex	22,508	16	37.5	17,064	5,444	8	8	24.1	104.3			7						1	1		1
Little Rock, Ark	13,185	5	19.8			3	2					1	1								
Nashville, Tenn	43,743	20	24.0	27,874	15,869	8	12	14.7	39.3			3	4			1				1	1
Clarksville, Tenn	7,250	2	14.5	4,000	3,250	1	1	7.2	7.2											1	
Memphis, Tenn	33,000	38	28.0	17,293	16,307	18	20	54.3	62.5			1	7				3			3	1
Murfreesboro, Tenn	3,850	2	13.5	2,000	1,850	1	1	26.1	29.1				1								
Louisville, Ky	123,615	48	20.3			33	15					10	9							1	6
Bowling Green, Ky	6,000	2	17.4	4,000	2,000	2						1				1					
Cincinnati, Ohio	255,708	90	18.4			83	7					33				1				10	3
Cleveland, Ohio	160,140	54	17.6													2				3	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 5, 1881—Continued.

Cities and States.	Total population according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Gallipolis, Ohio	4,500	3	34.8			1	2														
Dayton, Ohio	38,677	18	24.1			16	2					7				1				4	1
Portsmouth, Ohio	11,314	2	9.2			2						2									
Indianapolis, Ind	75,074	36	25.0			32													1	4	1
Richmond, Ind	12,743	4	16.4			4						2						1		1	
Evansville, Ind	29,280	13	23.2			10	3										1			3	2
Chicago, Ill	503,304	221	22.3									93				11		5		25	
Peoria, Ill	29,315	15	26.7									6									
Elgin, Ill	8,770	3	17.9			3						1								2	
Jacksonville, Ill	10,927	5	23.9			5						1						1			
Aurora, Ill	11,825	3	13.2			3						2									
Moline, Ill	8,000	7	45.6			7						3								1	
Rock Island, Ill	12,000	8	34.9			8						4				1				1	
Milwaukee, Wis	115,578	41	18.5			41						20				2		2		2	
Beloit, Wis	5,180	4	40.3			4						1						1			
Saint Paul, Minn	41,498	13	16.3			13															
Flint, Mich	9,000	4	23.2			4						1									
Saint Louis, Mo	350,522	136	20.2			118	18					40	6			8	1	3		16	4
Omaha, Nebr	30,518	5	8.9			5						4									
Lawrence, Kans	8,500	1	6.0	6,800	1,700	1															
Boulder, Colo	3,030																				
Salt Lake City, Utah	20,768	5	12.6			5						3									
Sacramento, Cal	21,420	9	21.8									2									
Vallejo, Cal	7,000	4	29.4			4						1								1	
Los Angeles, Cal	11,311	1	4.6			1															
Total	7,988,195	3,709	24.1									1,156	114			80	11	28	4	498	63

ABSTRACTS FROM CONSULAR REPORTS.

ANTWERP, BELGIUM.—United States Consul J. H. Steuart forwards the official report of mortality for the year 1880. He observes that small-pox has prevailed more or less throughout the year. The disease was confined to a part of the city which did not affect the shipping, and clean bills of health were issued to all vessels clearing for ports in the United States. The sanitary condition is remarkably good, considering the mobile character of the population and the deficiency of hospital accommodation for sick seamen.

APIA, SAMOAN ISLANDS.—United States Consul T. M. Dawson sends a report covering the period from October 13 to November 10, 1880. No estimate of population is given, and the only deaths reported are those of the editor of the Samoa Times, and of King Malietoa, both from consumption. A shock of earthquake occurred November 9. No record of deaths can be obtained, but the islands are regarded as very healthy.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys reports, for the month of December, 70 deaths in a population of 20,000; annual death-rate, 40.9 per 1,000. No contagious or epidemic disease is reported, and the above death-rate is not there regarded as excessive, since the general sanitary condition is considered good. Mean temperature, 85°.

CONSTANTINOPLE.—United States Consul G. H. Heap, under date of January 13, observes that the general health of Turkey is better than usual, no epidemic disease prevailing at present. There is still some disease among cattle, in a few provinces, but epizootic disease seems to be decreasing.

GIBRALTAR, SPAIN.—A report is forwarded by the United States consul giving the annual mortality from fevers in the civil population from January 1, 1873, to August, 1880. The deaths, beginning with 1873, were: 455, 457, 404, 448, 508, 470, and 419 in 1879. No estimate of population for those years is given.

GUAYMAS, MEXICO.—United States Consul A. Willard reports only 6 deaths for the month of December in a population of 5,500, of which but one death was under 5 years. Annual death-rate, 11 per 1,000.

HOBART TOWN, TASMANIA.—United States Consul A. G. Webster reports 48 deaths in November, of which only 2 were from contagious diseases. Population, 27,500; annual death-rate, 21.2 per 1,000; sanitary condition good.

MATAMOROS, MEXICO.—United States Consul W. P. Sutton forwards a report of mortality for 13 weeks, ending January 28. He states that small-pox was prevailing in August, and became epidemic in October. Since October 30 there have been 177 deaths from variola, and estimating the mortality at 10 per cent. of the cases, about 1,770 persons have been attacked. At the close of January it is supposed that there are about 300 cases in the city, and that sufficient material still remains to keep the disease up to this rate for the rest of the year. A committee has been appointed to furnish free orders for medicines and food to the poor, but while this may relieve some suffering, the epidemic can only be checked by compulsory vaccination, which is not likely to be enforced. The consul renews his recommendations as to restrictions on the exportation of rags, and observes that the whole neighboring Texas border is becoming infected from Mexico.

The report of mortality from October 30 to January 28 shows a total of 279 deaths, of which 177, or 63.5 per cent., were from small-pox. Of these, 139 were under 10 years of age, 20 between 10 and 15, and 18 over 15 years.

MAZATLAN, MEXICO.—United States Consul E. G. Kelton reports for the month of December 73 deaths, in a population of 14,000; annual death-rate, 61.4 per 1,000. Mean temperature, 72°. No contagious disease is reported.

MELBOURNE, AUSTRALIA.—The report of United States Consul O. M. Spencer for the month of October shows a total mortality of 383 in the city and suburbs having a population of 265,000; annual death-rate, 19 per 1,000. Five deaths were from typhoid fever and 31 from other diseases not specified. Mean temperature, 54°.3. Consumption is noted as one of the principal causes of death.

NASSAU, BAHAMAS.—United States Consul T. J. McLain, jr., reports, under date of January 29, that quarantine against Key West had been removed. There was no foundation for reports of yellow fever in Nassau, circulated by persons in Florida interested in preventing the departure of invalids and tourists for the island.

NEW ZEALAND.—The reports for the month of November give a total of 127 deaths in a population of 128,225; annual rate, 11.7 per 1,000. Births during the same month, 453; annual rate, 41.7 per 1,000. No epidemic disease is reported.

PANAMA, UNITED STATES OF COLOMBIA.—Under date of January 25, United States Consul J. Wilson reports 15 cases and 4 deaths for the preceding week, from "Panama fever". Five cases of yellow fever and one death are reported from the native hospital; but there is a difference of opinion among the physicians as to the nature of the disease, some regarding it as "bilious remittent" and others as a mild type of yellow fever.

PORTO RICO.—United States Consul E. Conroy reports, for the month of December, 89 deaths in a population of 23,240; annual death-rate, 45.1 per 1,000. Of yellow fever, 16 cases and 9 deaths are reported; of small-pox, 60 cases and 14 deaths; of typhoid fever, 3 cases and 1 death. The authorities are very reticent as to giving information concerning the sanitary condition of the province.

SABANILLA, UNITED STATES OF COLOMBIA.—United States Consul

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880–'81.															
Canada	Kingston	13,000	Feb. 5	5	16.3													0.8
Do	Port Sarnia	4,000	Feb. 5	3	39.1											2	1	
Cuba	Havana	195,437	Jan. 29	117	31.2						13		3					74
St. Domingo	San Domingo	8,000	Dec. 26	4	26.1													81
Do	do	8,000	Jan. 2	2	13.0													72
Do	do	8,000	Jan. 9	5	32.6													82
Do	do	8,000	Jan. 16	5	32.6													82
Do	do	8,000	Jan. 23	6	39.1													80
Hayti	Aux Cayes	10,000	Jan. 15	7	40.6													73
Do	do	10,000	Jan. 22	7	40.6													72
Do	Cape Haytien	10,000	Jan. 1	9	78.9													
Do	do	10,000	Jan. 8	3	20.9													
Do	do	10,000	Jan. 15	6	41.7													
Do	do	10,000	Jan. 22	6	41.7													
Do	do	10,000	Jan. 29	12	83.5													
Do	Port-au-Prince	30,000	Jan. 19	24	41.7													82
Do	do	30,000	Jan. 26	22	38.3													80
Do	Jacmel	6,000	Aug. 7	4	34.8													85
Do	do	6,000	Aug. 14	11	95.6													85
Do	do	6,000	Aug. 21	4	34.8													85
Do	do	6,000	Aug. 28	2	17.4													85
Do	do	6,000	Sept. 4	2	17.4													84
Do	do	6,000	Sept. 11	7	60.5													84
Do	do	6,000	Sept. 18	5	43.8													83
Do	do	6,000	Sept. 25	4	34.8													84
Do	do	6,000	Oct. 2															83
West Indies	Turks and Caicos Isl'ds	3,500	Jan. 1															80
Do	do	3,500	Jan. 8	3	44.7													81
Do	do	3,500	Jan. 15															81
Do	do	3,500	Jan. 22	1	14.9													79
Do	do	3,500	Jan. 29	1	14.9													80
Aspinwall	Colon	2,500	Jan. 29	4	83.6													85
Mexico	Matamoros	16,000	Jan. 28	20	65.2					300	15							
Do	Vera Cruz	20,000	Jan. 9	33	87.2				11		1							66
Do	do	20,000	Jan. 16	31	81.9				8		1							69
Do	do	20,000	Jan. 23	16	42.3				3		3							69
Canary Islands	Las Palmas	18,000	Jan. 8	11	31.8								1					
Do	do	18,000	Jan. 15	12	35.0													
Teneriffe	Santa Cruz	16,610	Jan. 1	12	37.7													63.4
Do	do	16,610	Jan. 8	6	18.8								2				2	63.2
Do	do	16,610	Jan. 15	5	15.7					2		1	1					66.7
Ireland	Queenstown	10,000	Jan. 29	8	41.7													49
Do	Belfast	174,412	Jan. 22	121	36.1								2		7		15	
Do	do	174,412	Jan. 29	166	42.0								2		1			
Do	Dublin	333,401	Jan. 22	292	45.5						1		4		10		22	33.7
Do	do	333,401	Jan. 29	303	47.3						2		8		7		15	31.5
Scotland	Leith	59,958	Jan. 22	34	29.5												7	24.3
Do	do	59,958	Jan. 29	38	29.2													27.9
Do	Dundee	155,100	Jan. 22	94	30.7											3		25.6
Do	Glasgow	601,266	Jan. 22	410	35.5								12				20	23.0
England	London	3,707,130	Jan. 22	2,016	28.4						42		13				136	23.4
Do	Bradford	197,196	Jan. 22	84	21.5												6	
Do	Sheffield	304,938	Jan. 22	149	24.8													22.3
Do	do	304,938	Jan. 29	169	28.9													27.3
Do	Bristol	217,000	Jan. 22	113	24.3												5	23.2
Do	Tunstall	27,775		14	26.2													29.5
Wales	Cardiff	83,284	Jan. 29	44	27.4								2				1	
France	Paris	1,988,806	Jan. 20	1,313	34.4						25		61				102	
Do	do	1,988,806	Jan. 27	1,343	35.2						32		50				88	
Do	Havre	92,068	Jan. 15	54	30.5													34.2
Do	do	92,068	Jan. 22	67	38.2													35.9
Do	Rouen	104,209	Jan. 29	46	32.9													
Do	Lyons	342,815	Jan. 15	187	28.4						10		2				3	
Switzerland	Zürich	22,163	Jan. 22	9	22.0													
Holland	Rotterdam	148,102	Jan. 22	103	35.7											54	1	
Do	do	148,102	Jan. 29	117	40.6							1				38		
Germany	Berlin	1,087,500	Jan. 15	523	24.8							19	6	1	2	155	63	45.0
Do	Bremen	112,200	Jan. 15	51	24.4								1				1	
Do	Barmen	95,000	Jan. 22	38	20.8												4	45.0
Do	Breslau	273,000	Jan. 15	159	30.0						1		2				17	48.5
Do	Cologne	144,537	Jan. 22	69	24.8												9	
Do	Frankfort	137,000	Jan. 15	57	28.9												3	34.6
Do	Brunswick	74,000	Jan. 22	32	22.5													46.2
Do	Hamburg	400,000	Jan. 1	230	30.0										1		10	
Do	do	400,000	Jan. 8	192	25.0										3		1	
Do	Mannheim	53,500	Jan. 29	18	17.6													36.6
Bavaria	Munich	230,000	Jan. 8	137	31.1								1				19	
Do	do	230,000	Jan. 15	151	34.2						1		2				33	
Do	do	230,000	Jan. 22	129	29.3								1				12	
Do	Nuremberg	99,777	Jan. 1	46	24.0													37.6
Do	do	99,777	Jan. 8	70	36.5										3		9	37.5
Do	do	99,774	Jan. 15	50	26.1												7	42.3
Saxony	Dresden	220,216	Jan. 8	89	21.0											11	11	35.1
Do	Chemnitz	101,115	Jan. 15	48	24.9												2	
Do	Leipsic	149,000	Jan. 22	63	21.9													47.4
Belgium	Brussels	406,638	Jan. 22	253	29.8						1		5				4	
Do	Antwerp	173,643	Jan. 15	90	27.0					13	4	34	4			1	1	
Do	do	173,643	Jan. 22	84	25.2					13	4	36	4				1	
Italy	Genoa	185,000	Jan. 22	126	35.5													37.4
Do	do	185,000	Jan. 29	107	30.2													37.4
Do	Leghorn	98,104	Jan. 29	58	30.9													49.3
Austria	Vienna	728,574	Jan. 15	416	28.0						15		3				18	42.3
Do	do	731,277	Jan. 29	438	27.9						29		5				16	44.8
Do	Trieste	128,233	Dec. 26	63	25.6								1				4	
Do	do	128,233	Dec. 31	63	25.6						2		2				1	
Russian Poland	Warsaw	357,169	Jan. 15	160	23.4						3							21
Sweden	Stockholm	169,429	Jan. 8	114	36.3								1				22	30.2
Do	do	169,429	Jan. 15	115	36.7								3				15	16.0
Norway	Christiania	120,000	Jan. 15	54	23.1									6	4		9	4.4
Portugal	Oporto	108,346	Dec. 18	80	38.5						2		1					44.6
Do	Lisbon	225,152	Dec. 18	154	35.6								1					46.2

MORTALITY IN FOREIGN CITIES, &c.—Continued.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Spain	Malaga	115,882	Jan. 23	78	35.1	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	51
Do	Cadiz	65,028	Jan. 22	41	32.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64.2
Do	Seville	138,000	Jan. 16	82	31.0	.....	.....	.....	.....	.....	2	.....	2	.....	2	.....	12	55.4
Do	do	138,000	Jan. 23	44	16.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	4	57.2
Morocco	Tangier	15,000	Jan. 15	12	41.7	.....	.....	.....	.....	5	.....	.....	.....	1	.....	.....	.....	55
Barbary	Tripoli	20,000	Jan. 22	7	18.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76.8
Egypt	Alexandria	220,000	Jan. 8	179	42.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	do	220,000	Jan. 15	174	41.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	do	220,000	Jan. 22	149	35.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Colony	Cape Town	35,000	Jan. 10	32	47.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
India	Bombay	644,405	Dec. 7	390	29.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	137	80
Do	do	644,405	Dec. 15	377	28.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145	77.7
Do	do	644,405	Dec. 21	403	32.6	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	158	77.1
Do	do	644,405	Dec. 28	433	35.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	170	79.2
Do	Calcutta	429,537	Dec. 25	317	38.9	.....	30	.....	.....	.....	1	.....	9	.....	.....	.....	2	61.2
Do	do	429,537	Jan. 1	293	35.5	.....	19	.....	.....	.....	.....	.....	11	.....	.....	.....	1	63.2

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE FOUR WEEKS ENDING JANUARY 29, 1881.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.			Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
German Hospital	New York, N. Y	General	100	85	5	7	2	4	..	..	..	2	1	1	2	3	1	1	1	1	2	..	2	..	..	..	2
City Hospital	Rochester, N. Y	do	125	70	..	..	1	7	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Saint Mary's Hospital	do	do	320	209	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	11	..	..
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saint Michael's Hospital	Newark, N. J	do	140	149	13	4	4	14	..	..	..	1	1	1	1	..	..	..	..	2	1	1	..	3	6	..	4
Homeopathic Hospital	Pittsburgh, Pa	do	40	20	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	..	..	1	1	..	..
Jewish Hospital	Philadelphia, Pa	do	40	25	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Freedmen's Hospital	Washington, D. C	do	300	256	4	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Providence Hospital	do	do	160	112	3	..	5	7	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	11	15	..	8
Cincinnati Hospital	Cincinnati, Ohio	do	500	....	24	13	4	33	..	..	..	2	6	..	4	..	..	..	..	4	5	1	4	1	7	..	..
Saint Luke's Hospital	Detroit, Mich	do	25	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
German Hospital	San Francisco, Cal	do	150	81	4	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	4	4	..	2
Naval Hospital	Brooklyn, N. Y	do	115	57	2	1	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	..	1
Do	Washington, D. C	do	50	22	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Hospital for Insane	Middletown, Conn	Insane	540	541	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willard Asylum	Willard, N. Y	do	..	1676	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
State Hospital for Insane	Danville, Pa	do	700	391	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Lunatic Asylum	Williamsburg, Va	do	368	335	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Carolina Insane Asylum	Raleigh, N. C	do	..	273	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
State Lunatic Asylum	Austin, Tex	do	..	375	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Michigan Asylum	Kalamazoo, Mich	do	680	673	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Insane Asylum of California	Stockton, Cal	do	1108	1106	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Name of hospital.	Place.	Character of hospital.	Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
			Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
German Hospital	New York, N. Y	General	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	16	5	88
City Hospital	Rochester, N. Y	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	23	1	73
Saint Mary's Hospital	do	do	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	25	5	203
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	7	..	5
Saint Michael's Hospital	Newark, N. J	do	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	80	65	16	148
Homeopathic Hospital	Pittsburgh, Pa	do	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	23	1	26
Jewish Hospital	Philadelphia, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	19	1	22
Freedmen's Hospital	Washington, D. C	do	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	54	83	13	264
Providence Hospital	do	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	83	81	8	105
Cincinnati Hospital	Cincinnati, Ohio	do	..	..	..	..	8	3	1	8	2	..	..	2	..	..	..	..	..	..	..	..	300	272	27	354
Saint Luke's Hospital	Detroit, Mich	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	14
German Hospital	San Francisco, Cal	do	..	..	..	..	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	44	29	4	7
Naval Hospital	Brooklyn, N. Y	do	..	..	..	..	6	3	..	7	..	..	..	..	..	..	..	..	..	..	..	..	9	6	..	14
Do	Washington, D. C	do	..	..	..	..	2	2	1	3	..	1	..	..	..	..	..	..	..	..	..	..	11	13	1	19
Hospital for Insane	Middletown, Conn	Insane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21	5	4	554
Willard Asylum	Willard, N. Y	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	2	10	1677
State Hospital for Insane	Danville, Pa	do	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	13	8	2	394
Eastern Lunatic Asylum	Williamsburg, Va	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	3	2	326
North Carolina Insane Asylum	Raleigh, N. C	do	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	2	274
State Lunatic Asylum	Austin, Tex	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	4	3	376
Michigan Asylum	Kalamazoo, Mich	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	6	..	680
Insane Asylum of California	Stockton, Cal	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	1	6	1107

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, FEBRUARY 26, 1881. [No. 35.

P. FOSTER, M.D. 53 E. 26th ST.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BROWNSVILLE, TEX.—The United States consul at Matamoros, Mexico, Mr. W. P. Sutton, and Dr. C. B. Combe, inspector on the Texas side, having urged the importance of measures to prevent the spread of small-pox on the United States border, the National Board of Health requested the Surgeon-General of the Army to institute an inquiry into the origin of the disease at Brownsville, Tex. With this object, Surgeon J. C. G. Happersett, U. S. A., post surgeon at Fort Brown, was directed to investigate the subject, and under date of January 13 he makes the following report to the medical director of the Department of Texas:

In relation to the epidemic of small-pox now prevailing here, I have the honor to state that the disease, so far as Brownsville and its immediate vicinity are concerned, is abating. On Sunday, January 9, but 46 cases existed within the city limits.

It must be remembered, however, that the diminution in the number of cases is probably owing to the exhaustion of unprotected material rather than to the influence of any hygienic measures, other than vaccination, which have been urged upon the municipal authorities.

The ordinance authorizing compulsory vaccination was really a dead letter until within ten days (now being carried out), and it seems impossible to either isolate the cases, or to destroy the local points of infection, by proper fumigation.

For the history of the disease in Brownsville Dr. Happersett refers to the following note, accompanying his report for the month of December:

Small-pox made its appearance in Brownsville, Tex., about the middle of the month of September, 1880, introduced from Matamoros, Mexico, where it was then prevailing in epidemic form. The first case was that of a Mexican woman who had been employed to nurse a child sick with small-pox in Matamoros. The child died, and the woman returned to Brownsville, being at the time covered with the eruption. She was visited by all of her friends and neighbors for some weeks, and finally recovered. This was during the latter part of August and early part of September, and from this case has arisen the epidemic which has proved so fatal. The disease spread slowly until the middle of November, but so indifferent were the residents of the place to the presence of the disease that no effort was made to prevent cases, even in the desquamating stage, from traveling about publicly. Large processions paraded the streets as escort to the public funerals from the crowded churches.

In the latter part of November so many cases were known to exist that even the Mexican population showed some alarm.

An order from headquarters of the post, prohibiting all intercourse between Fort Brown and Brownsville, was followed by a meeting of the town council and health officials. Several of the physicians attended the meeting and urged the necessity for prompt and energetic action. The measures urged were vaccination, isolation, and fumigation.

From the known opposition of the Mexicans to the former it was made obligatory, under penalty of fine, if found unvaccinated after six days. This, as well as the other measures, was little better than a dead letter. I am informed by the health officer that about 300 have been vaccinated; nor has there been a single arrest for violation of any of the ordinances approved at that meeting.

Probably owing to the exceptional cold of the present season, the mortality among the Mexicans has been very great.

The examinations made by the policemen detailed for the purpose have been so carelessly done that I place no dependence upon the returns.

The following data I copy from the record of the health officer: Population, 5,800; number of cases, 280; number of deaths, 50; number of cases at present, 80.

The garrison was carefully examined, and as soon as reliable vaccine matter could be obtained every man, woman, and child not presenting undoubted evidence of having been recently successfully vaccinated was vaccinated.

But two cases of the disease have so far appeared in the garrison. Of these, one presented no evidence of vaccination; the other had been vaccinated, and his attack is the mildest form of varioloid.

It is claimed that small-pox always prevails here. However true this may be of Matamoros, it certainly is not so of Brownsville, for, as that report shows, the first case occurring here is well known, and the spread of the disease clearly traced from that case.

There can be no doubt that the handling and shipment of rags, as mentioned by the United States consul at Matamoros, is attended by great danger, and, in my opinion, should be prevented, unless after complete disinfection.

This article of export comes not alone from Matamoros, but rags, wool, and hides are collected from both sides of the Rio Grande, as far, at least, as Rio Grande City (Fort Ringgold, where the disease in virulent form is now prevailing), and brought by steamboats to this place.

In this connection, however, I desire to state that I have conversed with the largest house engaged in this business, either here or in Matamoros, and am informed that no rags have been purchased or packed since the month of August, 1880.

The last shipment was by the railroad in the same month, but the vessel on which this lot was shipped stranded inside the bar, and the load was transferred to the schooner Flora Woodhouse, which vessel sailed from the port of Brazos Santiago January 5, 1881.

No case of small-pox has occurred among the employés of either the packing, shipping, or transporting parties.

This, however, does not prove that it is not a source of great danger, and especially will be so after an epidemic so widespread as the present.

It is very difficult to get reliable information in regard to the city of Matamoros.

The Mexicans are opposed to vaccination, as well as every other method known for the prevention of this or other contagious disease, believing such to be the will of God; but the evidence is that the disease is on the increase, or at least not abating, and from the known filthy condition of the town, and total lack of precautionary

measures by the public authorities, it is not reasonable to suppose there can or will be any abatement so long as there is ready material.

The exceptional cold of the winter in this latitude has added greatly to the fatality of the epidemic, and I am informed by the local physicians that death frequently occurs from congestion of lungs, owing to lack of proper clothing.

Hæmorrhagic cases are specially frequent, and of course fatal.

The disease has so far been confined principally to the poorer classes, those poorly fed, clad, and housed, living in filth, in which the towns of Brownsville and Matamoros abound, but an occasional case among the whites, or better class of Mexican population, shows only too well that no class of citizens will be exempted.

Very respectfully, your obedient servant,

J. C. G. HAPPERSETT,
Surgeon, U. S. Army, Post Surgeon.

FORT CUSTER, MONT.—Dr. J. C. Merrill, U. S. A., reports, under date of January 17, an epidemic of scarlet fever at the post. The first case, the child of a laundress, was taken November 14; since that time there have been 9 cases among children of soldiers and 10 among those of the officers. Of these cases 2 were fatal. No case occurred among adults till January 13, when a corporal went to hospital with the disease, and three other men followed on the 17th; all four are convalescent. The origin of the disease is ascribed to the presence of some Crow Indians, as they had suffered greatly from scarlet fever for some time before their arrival, and their blankets and buffalo robes make the most retentive *fomites* for any poison.

HAVANA, CUBA.—During the week ending February 11, only 2 deaths from yellow fever are reported, one of them being a soldier and one a citizen. There were 19 deaths from small-pox in the same period.

TRENTON, N. J.—Dr. E. M. Hunt, secretary of the State board of health of New Jersey, under date of January 22, 1881, writes as follows:

There have been 4 cases of small-pox in Trenton. The normal school had one case, and so suspended. Vaccination is thoroughly followed up. Sporadic cases have occurred in various places in the State. The report of cases in the Beverly school was unfounded.

NOTICE.—The attention of health officers and others who fill the weekly reports of mortality in cities of the United States, is especially invited to the change of form in the cards, and in the table compiled from them. In the column for the number of deaths, white and colored, those places only will hereafter be noted whose reports are definitely known to separate the diseases and the deaths of the two races, and which can furnish the respective populations. All populations not agreeing with those previously given have been changed in accordance with the figures furnished by the Census Bureau, and remain subject to correction from that office.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

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DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FOUR WEEKS ENDING JANUARY 8, 15, 22, AND 29, 1881.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Annual rate per 1,000 under 5 years.	Annual rate per 1,000.
Portland, Me	2.7	14.2
Concord, N. H	3.8	21.6
Burlington, Vt	3.4	18.4
Boston, Mass	10.8	26.3
Edgartown, Mass	.....	40.1
New Bedford, Mass	5.4	21.8
Newburyport, Mass	4.8	19.2
Marblehead, Mass	12.2	24.4
Plymouth, Mass	1.8	18.4
Fall River, Mass	9.5	19.6
Lowell, Mass	5.2	16.9
Lawrence, Mass	2.4	14.3
Worcester, Mass	6.7	17.4
Lynn, Mass	6.4	15.6
Brockton, Mass	7.6	18.2
Holyoke, Mass	8.9	15.5
Bridgewater, Mass	.....	25.2
Milford, Mass	1.4	11.2
Chicopee, Mass	6.9	17.2
Fitchburgh, Mass	7.3	25.2
Somerville, Mass	5.7	17.2
Springfield, Mass	3.6	14.4
Providence, R. I	5.2	21.0
New Haven, Conn	6.0	21.1
New Britain, Conn	3.7	18.6
Fairfield, Conn	3.7	22.5
New York, N. Y	11.7	31.0
Brooklyn, N. Y	13.2	25.8
Yonkers, N. Y	4.1	19.3
Poughkeepsie, N. Y	3.8	18.1
Buffalo, N. Y	5.5	15.1
Hudson County, N. J	8.8	25.1
Newark, N. J	10.5	26.0
Orange, N. J	7.9	16.8
Camden, N. J	5.9	20.6
Plainfield, N. J	14.6	17.9
Philadelphia, Pa	7.2	23.5
Pittsburgh, Pa	3.9	20.2
Erie, Pa	4.2	12.7
District of Columbia	6.5	21.6
Norfolk, Va	6.0	30.2
Lynchburg, Va	10.4	41.7
Charleston, S. C	7.3	31.2
Augusta, Ga	9.0	23.1
Atlanta, Ga	5.8	21.9
Rome, Ga	2.6	13.0
Brunswick, Ga	8.9	26.7
Key West, Fla	6.5	15.2
Mobile, Ala	8.3	37.2
Vicksburg, Miss	9.6	38.6
Columbus, Miss	2.5	12.4
New Orleans, La	7.6	31.0
Baton Rouge, La	9.1	25.4
Shreveport, La	9.5	26.0
Galveston, Tex	9.9	36.8
Nashville, Tenn	7.9	23.7
Memphis, Tenn	8.2	41.1
Clarksville, Tenn	.....	7.2
Murfreesboro', Tenn	3.4	13.8
Louisville, Ky	5.9	22.1
Cincinnati, Ohio	7.3	21.6
Dayton, Ohio	4.0	15.1
Gallipolis, Ohio	5.8	8.7
Portsmouth, Ohio	6.0	24.1
Indianapolis, Ind	4.7	18.2
Evansville, Ind	11.5	14.5
Richmond, Ind	3.0	8.1
Peoria, Ill	6.2	16.0
Aurora, Ill	5.5	17.6
Jacksonville, Ill	4.8	10.7
Moline, Ill	6.5	14.7
Elgin, Ill	14.2	28.2
Milwaukee, Wis	11.4	22.9
Beloit, Wis	7.5	15.1
East Saginaw, Mich	8.2	16.4
Dubuque, Iowa	1.2	11.7
Keokuk, Iowa	3.2	19.3
Saint Louis, Mo	7.3	20.2
Omaha, Nebr	8.6	14.1
Boulder, Colo	4.3	8.6
Salt Lake City, Utah	12.5	24.5
Sacramento, Cal	2.4	15.2
Los Angeles, Cal	5.8	17.3

DIAGRAM SHOWING THE SAME FOR THE MONTH OF JANUARY, 1881, FROM THE FOLLOWING PLACES.

Amsterdam, N. Y	3.6	15.6
Kingston, N. Y	4.3	8.7
Paterson, N. J	7.9	22.7
Allentown, Pa	9.8	30.7
Scranton, Pa	3.5	12.1
Petersburg, Va	5.4	21.2
Selma, Ala	7.8	25.1
Lansing, Mich	5.7	15.8
Saint Paul, Minn	6.0	15.9
Chicago, Ill	10.2	22.8

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 12, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	7	10.8			7						1								3	
Concord, N. H	13,838	7	26.4			7						1						2			
Burlington, Vt	11,364	2	9.2	11,248	116	2						2									
Boston, Mass	362,535	177	25.5			174	3					69	2			3				34	
Cambridge, Mass	52,800	17	16.7			17						9									
Edgartown, Mass	1,301	1	40.1			1															
New Bedford, Mass	26,875	10	19.4			9	1					5									
Newburyport, Mass	13,537	9	34.7			9						1						1		2	
Marblehead, Mass	7,467	2	14.0	7,451	16	2						1									
Nantucket, Mass	3,726	1	13.8			1														1	
Plymouth, Mass	7,094	4	29.4			3	1					1									
Fall River, Mass	49,006	18	19.2			18						7						1		1	
Lowell, Mass	59,485	32	28.1			32						12				2				4	
Lawrence, Mass	39,178	13	17.3			13						6				1		3		4	
Pittsfield, Mass	13,367	1	3.0			1															
Worcester, Mass	58,295	20	17.9									6						2			
Lynn, Mass	38,284	10	13.6									5								1	
Brockton, Mass	13,608	3	11.5			3						1						1		1	
Holyoke, Mass	21,851	10	23.9			10						2						2		1	
Bridgewater, Mass	3,620			3,600	20																
Chicopee, Mass	11,325	2	9.2			2														1	
Fitchburgh, Mass	12,405	1	4.2			1															
Somerville, Mass	24,985	8	16.7			8						3						1			
Springfield, Mass	33,340	6	9.4									1								1	
Spencer, Mass	7,466	4	28.0			4						2								1	
Quincy, Mass	10,529	1	5.0			1															
Northampton, Mass	12,172	4	20.5			4															
North Adams, Mass	10,192	1	5.1			1										1					
Haverhill, Mass	18,475	5	14.1			5						1									
Gloucester, Mass	19,329	5	13.6			5						1								1	
Chelsea, Mass	21,785	12	28.7			12						6				1				3	
Clinton, Mass	8,030	3	19.6			3						1								2	
Beverly, Mass	8,445	1	6.0			1						1									
Attleborough, Mass	11,109	4	18.5			4						1								1	
Malden, Mass	12,017	7	30.5			7						3									
Salem, Mass	27,500	11	20.7			11						2								3	
Taunton, Mass	21,200	11	26.5			11						2									
Westboro', Mass	5,217	3	30.1			3															
Woburn, Mass	10,982	3	14.3			3														1	
Weymouth, Mass	10,571	9	43.5			9														3	
Waltham, Mass	11,711	3	13.2			3						1									
Webster, Mass	5,696	4	36.0			4						2								1	
Brookline, Mass	8,200	2	13.6			2						1									
Newton, Mass	17,000	14	42.5			14						4								2	
Providence, R. I	104,852	37	18.4	101,000	3,852	35	2	18.1	27.5			12				1				7	
New Haven, Conn	62,882	28	23.2			27	1					6				1				2	
New Britain, Conn	13,978	4	14.9			4						3								1	
Fairfield, Conn	3,750																				
Waterbury, Conn	20,269	5	12.9			5						2				1				1	
New York, N. Y	1,206,577	709	30.6	1,186,144	20,433	698	11	30.6	28.1			274				20		5		99	
Brooklyn, N. Y	566,689	253	23.3			248	5					104	1							27	1
Yonkers, N. Y	18,892	4	11.0			4						1				1				1	
Poughkeepsie, N. Y	20,207	6	15.5			6						3				2					
Newburgh, N. Y	18,050	4	11.6			4						1									
Utica, N. Y	33,913	11	16.9			11						2								2	
Buffalo, N. Y	155,137	54	18.2			54						22				4				2	
Cambridge, N. Y	1,850	1	29.1	1,800	50	1						1									
Seneca Falls, N. Y	6,000	3	26.1			3														1	
Little Falls, N. Y	6,940	7	51.5			7						2								1	
Tarrytown, N. Y	3,270	2	31.8			2						1									
Hudson County, N. J	187,950	101	28.0									36				4				12	
Orange, N. J	13,206	5	19.8			5						3									
Camden, N. J	41,658	21	26.3			17	4					6								1	1
Plainfield, N. J	8,126	2	13.0			2						1									
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	407	25.1	815,182	31,798	390	17	25.0	27.9			128				2		2		64	3
Pittsburgh, Pa	156,381	57	19.0	152,290	4,091	55	2	18.8	26.1			25	1			7				3	
Erie, Pa	27,730	8	15.1									3								1	
Wilmington, Del	42,499	22	26.9			19	3					6	3					1		3	
Baltimore, Md	332,190	150	23.6	278,487	53,703	103	47	19.3	45.7			51				4	2			16	6
District of Columbia	180,000	76	22.0	120,000	60,000	34	42	14.7	36.4			9	13			2				1	9
Norfolk, Va	21,966	19	45.1			10	9					3	5				1			1	1
Richmond, Va	63,803	49	40.1	37,970	26,697	15	34	16.6	66.8			6	18							2	3
Lynchburg, Va	16,500	10	37.7			4	6					1	3			1					1
Wilmington, N. C	17,000	1	3.0																		
Charleston, S. C	49,990	34	35.5	22,713	27,277	10	24	23.3	45.6			2	4					1		1	7
Augusta, Ga	23,023	6	13.6			2	4					1	1								1
Atlanta, Ga	37,421	10	13.8	21,086	16,335	3	7	10.4	22.3				3				1			2	
Savannah, Ga	30,681	16	27.2	15,007	15,674	6	10	20.9	32.1				2			1					1
Rome, Ga	5,000	2	20.9			2															
Brunswick, Ga	2,800	2	36.0	1,360	1,440	1	1	34.8	37.3				1								
Jacksonville, Fla	8,000	4	26.1	5,000	3,000	4		41.7												3	
Key West, Fla	12,000	4	17.4	8,000	4,000	1	3	6.5	39.1			1	2							2	
Mobile, Ala	31,295	15	25.1	16,927	14,368	5	10	15.4	36.3			2	4							1	1
Selma, Ala	7,505	2	14.0	3,425	4,080	1	1	15.2	12.8			1	1								
Columbus, Miss	5,300	2	20.0	2,760	2,540		2		40.7				2								
Vicksburg, Miss	12,500	6	26.5			3	3						2								1
New Orleans, La	216,140	118	28.5	150,128	57,231	79	39	25.9	35.6			21	15			3		2		13	8
Shreveport, La	11,017	1																			
Baton Rouge, La	7,187	1	7.3			1		17.6													
San Antonio, Tex	20,561	8	20.6			7	1					2								2	
Waco, Tex	8,000	3	19.6	5,000	3,000	3						1									
Brownsville, Tex	5,450	13	124.4	5,300	150	13	128.0					8				1				1	
Little Rock, Ark	13,185	7	27.7			6	1					1				2		2			
Nashville, Tenn	43,461	11	13.2	27,874	15,669	6	5	11.0	16.5			1	2							1	1
Memphis, Tenn	33,593	20	31.2	17,386	16,207	6	14	18.1	43.7			1	6						1	1	1

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 12, 1881.

Cities and States.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
									Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.										
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
Portland, Me.	1												1		1																
Concord, N. H.													1		2																
Burlington, Vt.													1																		
Boston, Mass.	3		2		17				3		1		1		16				6	3			5		3				2	
Cambridge, Mass.					1										2				4				1							
Edgartown, Mass.																														
New Bedford, Mass.					1										1															
Newburyport, Mass.																	1													
Marblehead, Mass.					1										1															
Nantucket, Mass.																														
Plymouth, Mass.					2																				1					
Fall River, Mass.	2														3				1											
Lowell, Mass.					1		1		1						4		2		2										1	
Lawrence, Mass.									1				1												1					
Pittsfield, Mass.																														
Worcester, Mass.							1						3		1														1	
Lynn, Mass.					2				1						1															
Brockton, Mass.																														
Holyoke, Mass.									1						1															
Bridgewater, Mass.																														
Chicopee, Mass.																														
Fitchburgh, Mass.																														
Somerville, Mass.	1				2																									
Springfield, Mass.													1		1															
Spencer, Mass.																							2							
Quincy, Mass.															1															
Northampton, Mass.					1																									
North Adams, Mass.																														
Haverhill, Mass.					1				1																					
Gloucester, Mass.					1				1										1											
Chelsea, Mass.															1				2				3							
Clinton, Mass.																														
Beverly, Mass.															1															
Attleborough, Mass.									1						1		1													
Malden, Mass.					2										1		1								1					
Salem, Mass.															1				3						1					
Taunton, Mass.															3				1											
Westboro', Mass.															1															
Woburn, Mass.																														
Weymouth, Mass.					1										1															
Waltham, Mass.																														
Webster, Mass.															1															
Brookline, Mass.																														
Newton, Mass.					3										3				2				1		1					
Providence, R. I.	1		1		2		1						3		2	1									2				1	
New Haven, Conn.	2				2				1						5				1											
New Britain, Conn.																			1											
Fairfield, Conn.																														
Waterbury, Conn.															1		1													
New York, N. Y.	14		9		43		4		3		10		40		87				41				8		14		6		7	
Brooklyn, N. Y.	9		1		29		6				5		17		29	2	3	1	7		2				6				1	
Yonkers, N. Y.																			1						1					
Poughkeepsie, N. Y.									1						1															
Newburgh, N. Y.			1																											
Utica, N. Y.	1										1																			
Buffalo, N. Y.					3		1		2		1		3		7				5											
Cambridge, N. Y.																														
Seneca Falls, N. Y.					1																									
Little Falls, N. Y.															2															
Tarrytown, N. Y.	1																		1											
Hudson County, N. J.	6		2		3				2		2		3		19						1				10		3			
Orange, N. J.							1								1															
Camden, N. J.													4		2	1														
Plainfield, N. J.							1																							
Asbury Park, N. J.																														
Philadelphia, Pa.	6		2		6	1	4		4				13		17	4	7		12	4							44	5	1	
Pittsburgh, Pa.	1				3				3				6		9	1							2		3	1			1	
Erie, Pa.					1												1													
Wilmington, Del.									2				1		3		1													
Baltimore, Md.	4		2	1	6	2	1			1			7		5	4	1		2	2					1				1	1
District of Columbia.	1		2	2	1			1					1		5	7	3	2	2	3										
Norfolk, Va.			1		2						1					2				1										
Richmond, Va.	1			3					1						3	2									1				1	3
Lynchburg, Va.																					1									1
Wilmington, N. C.																														
Charleston, S. C.									1							1			1											
Augusta, Ga.																														
Atlanta, Ga.																1									1					
Savannah, Ga.									1	1						3				1										
Rome, Ga.																														
Brunswick, Ga.											1																			
Jacksonville, Fla.																														
Key West, Fla.																														
Mobile, Ala.			1	1												1														
Selma, Ala.																1														
Columbus, Miss.																													1	
Vicksburg, Miss.											1				1															
New Orleans, La.	1		5	3	3	1			1		1		1	1	7	6														
Shreveport, La.																														
Baton Rouge, La.										1					1															
San Antonio, Tex.																														
Waco, Tex.															1															
Brownsville, Tex.	1																										9			
Little Rock, Ark.															1	1														
Nashville, Tenn.													1			1														
Memphis, Tenn.			1	1	1							2				5		1	1											

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 12, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Clarksville, Tenn	7,200	2	14.5	4,000	3,200	1	1	13.0	16.1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....
Murfreesboro', Tenn	3,800	1	13.8	2,000	1,850	.....	1	.....	29.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Louisville, Ky	123,625	46	19.4	.....	.....	36	10	.....	.....	.....	.....	8	3	.....	.....	.....	.....	2	1	6	2
Bowling Green, Ky	6,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Ohio	255,708	109	22.2	.....	.....	101	8	.....	.....	.....	.....	42	1	.....	.....	4	.....	.....	.....	13	4
Cleveland, Ohio	160,140	63	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	.....
Dayton, Ohio	38,677	12	16.1	.....	.....	12	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gallipolis, Ohio	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portsmouth, Ohio	11,314	3	13.8	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....
Indianapolis, Ind	75,074	33	22.9	.....	.....	28	5	.....	.....	.....	.....	12	.....	.....	.....	1	.....	2	2	4	1
Richmond, Ind	12,743	5	25.0	.....	.....	4	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	1
Evansville, Ind	29,280	12	20.4	.....	.....	9	3	.....	.....	.....	.....	3	3	.....	.....	.....	.....	3	.....	2	.....
Chicago, Ill	503,304	218	22.6	.....	.....	.....	.....	.....	.....	.....	.....	105	.....	.....	.....	6	.....	5	.....	24	.....
Aurora, Ill	11,825	1	4.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville, Ill	10,927	1	4.8	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elgin, Ill	8,779	2	11.9	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Moline, Ill	8,000	1	6.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Rock Island, Ill	12,000	4	17.5	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anna, Ill	1,496	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wis	115,578	44	19.7	.....	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	1	.....	.....	.....	5	.....
Beloit, Wis	5,180	2	20.1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Saginaw, Mich	19,016	3	8.2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Flint, Mich	9,000	2	11.6	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....
Dubuque, Iowa	22,254	4	9.4	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Keokuk, Iowa	12,117	3	12.9	11,165	952	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Davenport, Iowa	23,000	6	13.7	.....	.....	6	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Louis, Mo	350,522	150	22.3	328,522	22,000	135	15	21.4	3.56	.....	.....	53	3	.....	.....	7	.....	3	.....	17	3
Omaha, Nebr	30,518	5	8.6	.....	.....	4	1	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....
Lawrence, Kans	8,500	3	18.0	6,800	1,700	2	1	15.3	30.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Boulder, Colo	3,030	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salt Lake City, Utah	20,768	12	30.1	.....	.....	11	1	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	1	1
San Francisco, Cal	233,956	72	16.0	.....	.....	.....	.....	.....	.....	.....	.....	22	.....	.....	.....	.....	.....	.....	.....	13	.....
Sacramento, Cal	21,420	5	12.3	.....	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Vallejo, Cal	7,000	1	7.4	.....	.....	.....	.....	.....	.....	750	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Los Angeles, Cal	11,311	2	9.2	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	8,133,879	3,646	23.3	.....	.....	.....	.....	.....	.....	.....	.....	1,189	104	.....	.....	88	5	41	4	447	39

ABSTRACTS FROM CONSULAR REPORTS.

ALGIERS, AFRICA.—United States Commercial Agent A. Jourdan, under date of January 7, reports 82 deaths for the week. Among the causes noted were: Consumption 8, other lung diseases 26, croup 4, measles 2, typhoid fever 4, and diarrhœal diseases 5. The annual death-rate was 61.7 per 1,000.

AMOY, CHINA.—Reports to December 25 show that this city remains in its usual unsanitary condition, but no epidemic disease is reported.

CADIZ, SPAIN.—United States Consul B. G. Haynes, under date of January 29, informs the Surgeon-General of the United States Marine Hospital Service that on account of yellow fever having appeared in Senegal, Africa, all vessels sailing from that port after December 23 have been declared foul; and, also, all vessels sailing from Key West, Fla., after December 10, for the same reason.

DUBLIN, IRELAND.—During the three months ending January 1, 1881, there were 2,206 births registered in a population of 314,666; annual rate 28 per 1,000. During the same period 2,561 deaths were reported, giving an annual rate of 32.6 per 1,000. This rate is, however, reduced to 31.8 by omitting 64 deaths of persons brought into public institutions from outside the district. Sixteen of the principal towns of Ireland show the lowest death-rate of 15.6 in Newry, and the highest, 43.8, in Waterford; in the latter city measles caused 42 deaths, and in Cork 39. Small-pox is reported only in Dublin, where 14 deaths occurred.

FOOCHOW, CHINA.—United States Consul J. C. Wingate reports, December 18, that the native city continues in its usual filthy condition. The foreign settlement is well kept, and the health of the residents generally good. Mean temperature, 58°.

GHENT, BELGIUM.—United States Consul A. Lefebvre reports for the month of December 292 deaths, in a population of 130,670; annual death-rate 26.3 per 1,000. Causes of death, small-pox 1, typhoid fever 6, scarlet fever 7, and diphtheria 5, consumption 33, other lung diseases 64; diarrhœa prevalent, but deaths not given. Much snow and frost of late.

GUADALOUPE, WEST INDIES.—United States Consul Charles Bartlett reports for the two weeks ending January 16, a total of 28 deaths in Pointe à Pitre; annual death-rate 31.9 per 1,000. Causes of death not stated, but malarial fevers are most prevalent.

The Official Gazette of December 17 gives in four pages the order of December 12, regulating quarantine and sanitation.

LYONS, FRANCE.—United States Consul B. F. Peixotto, in his report of January 15, states that the mortality of this city had been increased from 24.6 to 28.4 per 1,000 by the cold weather lately prevailing. Ten deaths from small-pox are recorded for the week ending January 15, and measles, scarlet fever, and whooping-cough are prevailing. The general sanitary condition of the city is not commensurate with its importance and business, most of the numerous working people being very poorly housed.

MATAMOROS, MEXICO.—United States Consul W. P. Sutton reports 12 deaths from small-pox out of 20 from all causes, during the week ending February 5. Annual death-rate 65.2 per 1,000. There are supposed to be about 300 cases in the town.

MESSINA, ITALY.—United States Consul G. H. Owen sends a report including the months of June, July, August, and September, 1880. There were 779 deaths in the 4 months in a population of 122,220, giving an annual death-rate of 19.1 per 1,000. Typhoid fever caused 30 deaths, and other infectious diseases 44; among the latter, diphtheria was the most prevalent. General sanitary condition, good.

NEWCASTLE-UPON-TYNE, ENGLAND.—The report for the last three months of 1880 gives a total of 776 deaths, representing an annual rate of 20.8 per 1,000. The births registered were 1,273; annual rate 34 per 1,000. Deaths under 5 years, 327. Some of the principal causes of death were measles 6, scarlet fever 33, diphtheria 1, whooping-cough 13, enteric fever 12, diarrhœa 23. Diseases of respiratory organs 128, not specified as to classes.

NINGPO, CHINA.—United States Consul E. C. Lord reports this city in a fair condition, and no epidemic disease prevailed up to January 1.

Reports for the five weeks ending January 8, observes that typhoid fever has lately been quite frequent in this district, but no estimate of mortality can be given.

RIO DE JANEIRO, BRAZIL.—United States Consul Thomas Adamson reports for the two weeks ending January 22 17 deaths from yellow fever, 7 from small-pox, 6 from typhoid fever, 14 from "pernicious" fever, and 78 from consumption. Total deaths, 408; annual death-rate, 33.2 per 1,000. The British bark *Campanero* cleared for Baltimore January 24; the captain refused to take a bill of health from the United States consulate. The sailing of the vessel being

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880–'81.															
Vancouver's Island.	Victoria	5,000	Feb. 5	1	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
Canada	Montreal	135,000	Jan. 15	63	24.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	11.3
Do	....do	135,000	Jan. 22	43	16.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	12.2
Do	....do	135,000	Jan. 29	64	24.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	8.6
Do	....do	135,000	Feb. 5	65	25.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	8.1
Do	Port Sarnia	4,000	Feb. 14	1	13.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bermuda	Hamilton	14,867	Feb. 8	4	14.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
Do	....do	14,867	Feb. 15	3	10.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.5
Cuba	Havana	195,437	Feb. 5	159	42.5	.....	.....	.....	.....	.....	28	.....	.....	.....	.....	.....	.....	74
St. Christopher	Basseterre	10,000	Dec. 6	9	47.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Do	....do	10,000	Dec. 13	8	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	....do	10,000	Dec. 20	2	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
Do	....do	10,000	Dec. 27	7	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Guadeloupe	Point-a-Pitre	22,919	Jan. 23	10	22.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. of Colombia	Panama	12,000	Feb. 5	4	17.4	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	20	4	80
Mexico	Vera Cruz	20,000	Jan. 30	30	79.2	.....	.....	.....	4	.....	2	.....	.....	.....	.....	.....	.....	65
Do	Matamoros	16,000	Feb. 5	20	65.2	.....	.....	.....	.....	300	12	.....	.....	.....	.....	.....	.....	.....
Do	Manzanilla	800	Jan. 9	4	260.9	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....
Do	....do	800	Jan. 16	3	195.7	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....
Brazil	Rio de Janeiro	330,000	Jan. 15	195	30.8	.....	.....	.....	3	.....	4	.....	3	.....	.....	.....	8	.....
Do	....do	330,000	Jan. 22	213	33.7	.....	.....	.....	14	.....	6	.....	3	.....	.....	.....	6	.....
St. Helena	Jamestown	6,241	Jan. 8	3	25.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79.8
Do	....do	6,241	Jan. 15	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.6
Do	....do	6,241	Jan. 22	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.9
Canary Islands	Las Palmas	18,000	Jan. 22	14	40.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland	Leith	59,958	Feb. 5	37	32.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	38.6
Do	Dundee	155,100	Jan. 29	89	30.0	.....	.....	.....	.....	1	.....	1	.....	.....	.....	9	.....	29.6
England	Tunstall	27,775	Feb. 5	10	18.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	42.6
Do	London	3,707,130	Jan. 29	2,114	29.8	.....	.....	.....	.....	.....	52	.....	12	.....	2	.....	121	32.5
Do	Sheffield	304,938	Feb. 5	132	22.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40.0
Do	Liverpool	549,384	Feb. 5	385	36.9	.....	.....	.....	.....	1	.....	1	1	14	4	19	27	41.6
Do	Bradford	197,196	Jan. 29	90	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Wales	Cardiff	83,389	Feb. 5	46	28.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	42.6
France	Paris	1,988,806	Feb. 5	1,316	34.5	.....	.....	.....	.....	.....	35	.....	75	.....	.....	.....	96	.....
Do	Lyons	342,815	Jan. 22	194	29.4	.....	.....	.....	.....	.....	12	.....	3	.....	.....	.....	6	.....
Do	Rouen	104,209	Feb. 5	49	24.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	Jan. 22	159	26.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	22
Do	....do	316,952	Jan. 29	209	34.4	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	2	26
Do	Rotterdam	148,102	Feb. 5	104	36.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47	1	.....
Germany	Berlin	1,123,571	Jan. 22	577	26.7	.....	.....	.....	.....	5	.....	19	6	1	.....	131	73	46.0
Do	Barmen	95,000	Jan. 29	49	26.8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	39
Do	Frankfort	137,000	Jan. 22	50	20.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	36.5
Do	....do	137,000	Jan. 29	60	24.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	46.6
Do	Breslau	273,000	Jan. 22	179	34.2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	15	18.6
Do	Bremen	112,200	Jan. 22	37	17.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Hamburg	400,000	Jan. 8	223	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	.....
Do	Brunswick	74,000	Jan. 29	38	26.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	47.3
Do	Mannheim	53,500	Feb. 5	26	25.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39.6
Saxony	Chemnitz	101,115	Jan. 22	70	36.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
Do	Leipsic	149,000	Jan. 29	70	24.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	17.3
Belgium	Brussels	406,638	Jan. 29	214	27.4	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	7	.....
Denmark	Copenhagen	235,254	Jan. 18	99	22.0	.....	.....	.....	.....	.....	.....	7	1	.....	.....	10	.....	21.0
Italy	Rome	305,469	Jan. 8	162	27.7	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	12	51.1
Do	....do	305,469	Jan. 15	185	31.6	.....	.....	.....	.....	.....	15	.....	2	.....	.....	.....	12	51.1
Do	Palermo	219,398	Jan. 9	89	21.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	52.0
Do	....do	219,398	Jan. 15	102	24.2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3	52.0
Do	....do	219,398	Jan. 22	85	20.2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	52.0
Do	....do	219,398	Jan. 29	87	20.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66.8
Do	Genoa	185,000	Feb. 5	94	22.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.4
Austria	Trieste	128,293	Jan. 8	97	39.5	.....	.....	.....	.....	.....	3	.....	3	.....	.....	.....	5	.....
Do	....do	128,293	Jan. 15	87	35.4	.....	.....	.....	.....	.....	3	.....	3	.....	.....	.....	3	.....
Do	Vienna	731,277	Jan. 29	509	31.5	.....	.....	.....	.....	.....	26	.....	4	.....	.....	.....	19	45.0
Hungary	Buda Pesth	344,604	Jan. 8	234	38.4	.....	.....	.....	.....	.....	10	.....	6	.....	.....	.....	9	.....
Do	....do	344,604	Jan. 15	252	38.1	.....	.....	.....	.....	.....	5	.....	5	.....	.....	.....	5	.....
Russian Poland	Warsaw	357,169	Jan. 22	167	24.4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	4.6
Sweden	Stockholm	169,429	Jan. 22	103	32.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	4.5
Norway	Christiania	120,000	Jan. 22	51	22.1	.....	.....	.....	.....	5	.....	6	.....	.....	.....	11	8	8.3
Portugal	Oporto	108,346	Dec. 25	90	43.3	.....	.....	.....	.....	.....	6	.....	1	.....	.....	.....	.....	43.3
Do	....do	108,346	Jan. 1	83	40.0	.....	.....	.....	.....	.....	4	.....	3	.....	.....	.....	.....	51.5
Do	Lisbon	225,152	Dec. 25	159	36.8	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	48.9
Do	....do	225,152	Jan. 1	155	35.8	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	53.3
Spain	Cadiz	65,028	Jan. 29	47	37.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64.4
Do	Malaga	115,882	Jan. 29	71	32.0	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	.....	.....
Barbary	Tripoli	20,000	Jan. 29	7	20.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.1
Cape Colony	Cape Town	35,000	Jan. 17	24	35.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Egypt	Alexandria	220,000	Jan. 29	147	34.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British India	Calcutta	429,535	Jan. 8	256	31.1	.....	13	.....	.....	.....	1	.....	9	.....	1	.....	1	65.5
Japan	Kobe	18,282	Jan. 1	7	20.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,282	Jan. 8	16	45.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,282	Jan. 15	13	37.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTICE.—The authorities of all cities supplied with the new form of postal card recently adopted by the National Board of Health are requested to return any remaining cards of the old form, and to fill up the new forms as completely as possible.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, MARCH 5, 1881. [No. 36.

P. FOSTER, M.D. 33 E. 25th ST

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

QUARANTINE REPORTS.

NEW YORK CITY.—Dr. W. M. Smith, quarantine physician, sends the following report on small-pox, under date of January 24:

The following is a summary of cases of small-pox detected at this quarantine on vessels entering this port since the 1st of April last, with a brief statement of the disposition of the vessels.

Since the date mentioned small-pox has been found on fifteen vessels. Two deaths have been reported from this disease on vessels during their passage to this port, and 28 cases have been removed to the small-pox hospital at Blackwell's Island. They were taken from the following vessels:

April 2, ship *San Stephano*, from Antwerp, 1 death at sea, 3 cases on arrival. They were removed to hospital. The vessel was detained, and a fourth case developed the second day of detention. When with "all hands" satisfactory evidence of vaccination had been established, or the protective influence of previous vaccination shown by its failure, and the vessel had been thoroughly disinfected, the vessel was given pratique.

April 10, the schooner *C. B. Paine* entered port with 1 case of small-pox. The assurance that the case had been carefully quarantined on the vessel from the incipient stage was believed, and the vessel detained until all on board were vaccinated, and the vessel disinfected. A few hours sufficed for this purpose.

April 20, steamship *Zeeland*, 482 passengers, 79 crew; 2 cases on board, in the fourth day of eruption. Satisfactory evidence of isolation was given, and the vessel was allowed to proceed after vaccination of passengers and crew.

May 6, steamship *Hapsburg*, arrived from Bremen with 1,108 passengers, and reported 1 death at sea from small-pox. One case was detected in the first stage of the disease; assurances were given that the case buried at sea had been properly isolated from the beginning. The case on board, from the stage of its development, warranted the opinion that the infection had been received at the port of departure. The passengers and crew were vaccinated, the ship disinfected, and pratique was given the same day.

May 19, steamship *Gellert*, arrived from Hamburg with 1,012 steerage passengers. One case of small-pox was discovered in the steerage; this being in the initial stage of development, the usual precautions were adopted and the vessel allowed to proceed to her dock the same day.

May 22, steamship *Vaderland*, from Antwerp, with 442 steerage and 79 crew. One case of small-pox was detected which had not been isolated, owing to a mistake in the diagnosis by the ship's physician. The passengers and crew were vaccinated and detained under quarantine of observation until the results of vaccination were evident. All clothing was disinfected, the ship fumigated, and pratique given.

June 2, steamship *Herder*, arrived from Hamburg with 1,035 passengers and 110 crew, having 1 case of small-pox which had been isolated upon the first appearance of the disease. The ship was discharged without detention.

June 18, steamship *Main*, from Bremen, arrived with 726 passengers, having 1 case of small-pox. The ship was allowed to proceed after the usual course.

June 21, steamship *Arizona*, from Liverpool, arrived with 798 passengers, having 2 cases of small-pox.

July 13, steamship *Allemenia*, from Hamburg, with [illegible]7 passengers, arrived having 2 cases. No detention was deemed necessary beyond the time required for vaccination and disinfection.

November 7, bark *Kings County* arrived from Antwerp. Her captain reported 1 death at sea, which, from his description, was considered sufficiently suspicious of small-pox to warrant her detention at quarantine. The third day of her detention two cases of the disease developed; and on the fourth, a third case. The vessel was disinfected and detained until the result of the vaccination of the crew was satisfactory, and was then allowed to proceed.

November 8, steamship *Castalia* arrived from Mediterranean ports, with 749 passengers. Two cases of small-pox were found at the 15th or 16th day of development. A temporary hospital had been provided on the forward deck for the purpose of isolating the cases. Assurances were reiterated that they had been properly quarantined. The free ingress and egress of the attendant from this temporary hospital warranted the gravest suspicion that proper isolation had not been secured. Subsequent developments would have justified the detention of the vessel and the subjection of the passengers to quarantine of observation. In the face of the protestation of medical and other officers of a vessel, that all proper and necessary measures have been adopted to prevent infection of passengers and crew, it is sometimes difficult, as in this instance, to determine the path of duty.

The opportunity for complaint by those whose interests are affected by the restrictions of quarantine is not likely to be unimportant, if, as in this case, they are supported by the officials whose duty it is, and who are presumed to have full knowledge of the circumstances.

Impressed with an earnest desire to relieve the burden which quarantine imposes, the passengers and crew of the *Castalia* were vaccinated, the vessel disinfected, and allowed to proceed without further detention.

The steamship *Italia* arrived at quarantine December 13, with 749 Italian passengers, who embarked at Naples the 16th of November, having touched at several other ports, but taking no passengers except at the first-named port. A girl of six years was received who had an eruption of a suspicious character. The officers of the *Italia* were disposed to reject this passenger, but other counsels prevailed and the case was permitted to mingle with the crowd in the steerage. On arrival at this port, the case referred to had entirely recovered, but the blue-stained cicatrices gave unmistakable evidence of a recent attack of small-pox.

Two other cases at about the tenth day of development were discovered—one a case of the severest type (*confluent*); the other more mild (*variola discreta*). Neither of them had been isolated or proper care taken to prevent contact with other passengers, except so far as the helplessness of the severest case compelled quiet and comparative seclusion in one of the steerage berths.

The less severe case was freely mingling with the steerage passengers, and was detected when passing the quarantine officer. There could be no reasonable doubt that more or less of the passengers had become infected by these exposures, and it would have been an act of reckless indifference to the public health to have allowed the passengers to go to the city until protected by satisfactory results of vaccination, or time had established evidence of escape from infection. On the 17th instant they were removed to Hoffman's Island for observation, and the day following the crew were again examined. Such as seemed to require it were revaccinated, the steamer cleaned up, disinfected with sulphurous acid gas, and discharged the fifth

day after arrival at quarantine. The passengers were detained until the result of the vaccination was satisfactory, or its failure believed to be the consequence of protection by previous vaccination. The examination on the fifth day showed that in 345 persons the vaccination gave evidence of satisfactory results; those in which it failed were revaccinated. On the ninth day the 404 that were revaccinated were again examined. Of this number 147 showed promising results from the second vaccination. In 207 of those in which both vaccinations had failed there were good cicatrices from previous vaccinations or small-pox, and these were taken as evidences of protection equally as satisfactory as those in which vaccination was successful.

Sixty persons, who gave no evidence of previous vaccination or the success of the vaccinations since their arrival, were vaccinated a third time, detained until the full period of fourteen days had elapsed since their arrival, and were then discharged.

The clothing of these passengers in every instance was changed before they were discharged, and, with their baggage, subjected for several hours to disinfection by sulphurous acid.

In several instances during the past season the neglect to provide early and proper isolation of cases of this disease has subjected vessels to detention.

It would be good economy for all steamship companies transporting passengers to employ experienced and vigilant medical officers. Upwards of three hundred and twenty thousand emigrants have entered this port since the first of January last. This great emigration has necessarily created much anxiety and required incessant vigilance on the part of the medical officers at quarantine, to prevent the introduction of this disease into the great cities that cluster around the port of New York, and into far interior communities.

The period of incubation in this disease is so much longer than the average passage of vessels from European ports to New York that infection received at the port of departure is liable not to develop until after passing quarantine, and perhaps penetrating hundreds of miles into the interior. Hence the utmost care and watchfulness is required by the health authorities along the great currents of immigration, and particularly at such distributing points as Buffalo, Chicago, and Saint Louis, to prevent the extension of the disease.

When cases of small-pox are found in the popular stage, or satisfactory evidence is given that they were properly isolated at and subsequent to that stage of development, neither ship nor passengers have been detained longer than was necessary to cleanse and disinfect the one and vaccinate the others. Vaccination of crew and passengers has been adopted in every instance; rather out of respect to the belief of some observers that the disease is communicable from the moment when the initiatory fever begins than from any proofs of this which have been afforded in the course of a pretty large experience.

Experience, however, conclusively proves that infection from small-pox may develop several days after the success of vaccination is apparent, and the two principles progress "hand in hand," each modifying the other perhaps, but productive in the case of small-pox of communicable infection.

The result of careful observation is that persons who have been exposed to the infective principle of small-pox should not be discharged from quarantine previous to the eighth or tenth day after successful vaccination.

NOTICE.—The attention of health officers and others who fill the weekly reports of mortality in cities of the United States, is especially invited to the change of form in the cards, and in the table compiled from them. In the column for the number of deaths, white and colored, those places only will hereafter be noted whose reports are definitely known to separate the diseases and the deaths of the two races, and which can furnish the respective populations. All populations not agreeing with those previously given have been changed in accordance with the figures furnished by the Census Bureau, and remain subject to correction from that office.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

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HOSMER A. JOHNSON, M. D., &c., 4 Sixteenth street, Chicago, Ill.
ROBERT W. MITCHELL, M. D., &c., 34 Madison street, Memphis, Tenn.
SAMUEL F. PHILLIPS, esq., Solicitor-General, 1119 K street, Washington, D. C.
STEPHEN SMITH, M. D., &c., 31 West Forty-second street, New York.
THOMAS J. TURNER, M. D., U. S. N., 1227 M street, N. W., Washington, D. C.
TULLIO S. VERDI, M. D., &c. 815 Fourteenth street, N. W., Washington, D. C.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880–'81.															
Vancouver's Island	Victoria	5,000	Feb. 12	2	20.8													40
Guadeloupe	Point-a-Pitre	22,920	Jan. 31	16	36.3													
Do	do	22,920	Feb. 5	16	36.3													
Hayti	Jacmel		Oct. 9	5														83
Do	do		Oct. 16															82
Do	do		Oct. 23	5														82
Do	do		Oct. 30	3														82
Do	do		Nov. 7	3														82
Do	do		Nov. 14	3														82
Do	do		Nov. 21	7														82
Do	do		Nov. 28	3														82
Do	Aux Cayes	10,000	Jan. 29	5	26.0													75
Do	do	10,000	Feb. 5	8	41.5													74
Do	Port au Prince	30,000	Feb. 2	12	20.1													79
Do	do	30,000	Feb. 9	8	13.9													77
West Indies	Curaçao	12,025	Jan. 8	8	34.7													
Do	do	12,025	Jan. 15	10	43.3													
Do	do	12,025	Jan. 22	10	43.3													
Do	do	12,025	Jan. 29	10	43.3													
Do	do	12,025	Feb. 5	3	13.0													
Do	do	12,025	Feb. 12	6	26.0													
Azores	Fayal, Orta	7,630	Dec. 25	3	20.5													63
Do	do	7,630	Jan. 1	2	13.7													60
Do	do	7,630	Jan. 8	4	27.4													60
Do	do	7,630	Jan. 15	2	13.7													59
Canary Islands	Teneriffe, Santa Cruz	16,610	Jan. 22	7	22.0							2						68
Do	do	16,610	Jan. 29	9	28.2							1	1					69
Do	Las Palmas	18,000	Jan. 29	16	46.2													
St. Helena	Jamestown	6,420	Jan. 29															81
Scotland	Leith	59,958	Feb. 12	28	24.3								2				3	35
England	Liverpool	549,834	Feb. 12	300	28.4							1	5	13	5	16	22	38
Do	Cardiff	83,389	Feb. 12	34	21.2												4	42
Do	Sheffield	304,938	Feb. 12	123	21.0													36
Do	Tunstall	27,775	Feb. 12	15	28.1													39
France	Rouen	104,210	Feb. 12	82	41.0													
Switzerland	Zurich		Jan. 29	11														
Do	do		Feb. 5	10														
Holland	Rotterdam	148,100	Feb. 12	108	37.4							1				27	1	
Germany	Berlin	1,123,571	Jan. 29	547	25.3							23	9	5		127	68	29
Do	Barmen	95,000	Feb. 5	37	20.3													41
Do	Breslau	273,000	Jan. 29	163	31.1								3				17	21
Do	Cologne	144,537	Jan. 29	74	29.4												10	
Do	do	144,537	Feb. 5	89	32.0												8	
Do	Mannheim	53,500	Feb. 12	25	28.1													38
Bavaria	Munich	230,000	Jan. 29	132	29.9								1				16	
Saxony	Dresden	220,216	Jan. 29	107	25.2							1	1			13	13	22
Do	Leipsic	149,000	Feb. 5	77	26.8													36
Italy	Naples	461,570	Nov. 20	236	26.6								5				19	63
Do	do	461,570	Nov. 27	234	26.4								2				13	59
Do	do	461,570	Dec. 4	213	24.0								1				13	61
Do	do	461,570	Dec. 11	261	29.5								1				12	52
Do	do	461,570	Dec. 18	251	28.3								2				14	57
Do	Genoa	185,000	Feb. 12	148	39.9													46
Do	Leghorn	98,224	Feb. 12	63	33.4								2					70
Austria	Vienna	731,277	Feb. 5	542	34.0						30		4				23	34
Do	Buda-Pesth	365,512	Jan. 22	253	36.2						8		2				13	
Roumania	Bucharest	177,646	Jan. 22	106	31.7								5				7	
Do	do	177,646	Jan. 29	125	36.7						1		9				8	
Russia	Warsaw	357,170	Jan. 29	170	24.8						2							10
Norway	Christiania	120,000	Jan. 29	58	26.0					1		5	3			12	11	22
Spain	Cadiz	65,028	Feb. 5	29	23.2													64
Do	Seville	138,000	Jan. 30	64	24.2										2		4	57
Do	do	138,000	Feb. 6	53	20.0												4	57
Egypt	Alexandria	220,000	Feb. 5	167	39.6													
Cape Colony	Cape Town	35,000	Jan. 24	29	43.2													84
East Indies	Bombay	644,400	Jan. 4	400	32.4												169	77
Do	do	644,400	Jan. 11	383	31.0								2				182	77
Do	do	644,400	Jan. 18	436	35.3												176	79

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—The authorities of all cities supplied with the new form of postal card recently adopted by the National Board of Health are requested to return any remaining cards of the old form, and to fill up the new forms as completely as possible.

NOTICE.—The authorities of cities sending reports of mortality to the National Board of Health are respectfully requested to forward promptly the population as corrected by the Tenth Census. It is very desirable to have the white and colored populations given separately.

NOTICE.—The populations of cities of the United States adopted in the tables of the BULLETIN are those furnished by the city authorities to the National Board of Health. They differ in some cases from the figures given in mortuary reports.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 19, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	13	20.0			13														2	
Bangor, Me	16,857	8	24.7			8														1	
Concord, N. H	13,838	7	26.4			7						1						1			
Burlington, Vt	11,364	1	4.6	11,248	116	1															
Boston, Mass	362,535	187	26.9			183	4					71	2			3				32	1
Cambridge, Mass	52,740	21	20.6			21						8								3	
Edgartown, Mass	1,301	1	40.1																	1	
New Bedford, Mass	26,875	9	17.4			8	1									1				3	
Newburyport, Mass	13,537	10	38.5			10						1								3	
Marblehead, Mass	7,467	2	14.0	7,451	16	2															
Nantucket, Mass	3,726	1	13.8																	1	
Plymouth, Mass	7,094	3	22.0			3															
Fall River, Mass	49,006	13	13.8			13						5									
Lowell, Mass	59,485	23	19.2	59,307	178	22	1					7								1	
Lawrence, Mass	39,178	14	18.6			14						7						2		3	
Worcester, Mass	58,295	21	18.8									9						1		4	
Lynn, Mass	38,284	10	13.6									1								3	
Holyoke, Mass	21,851	6	14.3			6						1				1				2	
Bridgewater, Mass	3,620																				
Chicopee, Mass	11,325	10	46.0			10						2									
Fitchburgh, Mass	12,500	4	16.8			4						3				1					
Somerville, Mass	24,985	8	16.7			8						3									
Springfield, Mass	33,340	9	14.1									4								2	
Spencer, Mass	7,466	2	14.0			2						1									
Quincy, Mass	10,529	3	15.1			3						1								1	
Northampton, Mass	12,172	7	30.1			7						3								1	
North Adams, Mass	10,192	4	20.5			4						1									
Haverhill, Mass	18,475	6	16.9			6						1								3	
Gloucester, Mass	19,329	2	5.4			2						1									
Chelsea, Mass	21,785	8	19.1			8						2						1		2	
Clinton, Mass	8,030	5	32.6			5						3						1			
Beverly, Mass	8,445	4	24.0			4														1	
Attleborough, Mass	11,109	2	9.3			2						1						1			
Malden, Mass	12,017	3	13.1			3															
Salem, Mass	27,500	8	15.0			8						3				1		1		2	
Taunton, Mass	21,200	11	26.4			11						1								3	
Westboro', Mass	5,217	3	30.0																	1	
Woburn, Mass	10,982	4	19.0			4														3	
Weymouth, Mass	10,571	3	14.5			3														1	
Waltham, Mass	11,71	5	22.0			5						1								1	
Webster, Mass	5,696	1	9.0																		
Westfield, Mass	7,700	3	20.7			3														1	
Brookline, Mass	8,200																				
Newton, Mass	17,000	10	30.4			10						4				1					
Providence, R. I	104,850	43	21.3	101,052	3,800	41	2					11	1			2				2	1
New Haven, Conn	62,882	24	19.9			23	1					3	1							6	
New Britain, Conn	13,978	2	7.5																		
Waterbury, Conn	20,269	6	15.4			6	1					1									
Fairfield, Conn	3,748	2	30.0			1	1					1								1	
New York, N. Y	1,206,577	683	29.5	1,186,144	20,433	676	7					296				11		6		95	
Brooklyn, N. Y	566,689	268	24.7			258	10					99	7			9				35	2
Yonkers, N. Y	18,892	3	8.3			3						1								1	
Poughkeepsie, N. Y	20,207	11	28.3			11						2								2	
Newburgh, N. Y	18,050	2	5.8			2															
Buffalo, N. Y	155,137	58	19.5			58						19				5				5	
Cambridge, N. Y	1,850																				
Seneca Falls, N. Y	6,000																				
Tarrytown, N. Y	3,270																				
Utica, N. Y	33,913	4	6.1			4						1									
Hudson County, N. J	187,950	86	23.8			86						40				3				10	
Newark, N. J	136,400	65	24.8			60	5					24				2				10	
Orange, N. J	13,206	1	3.9			1														1	
Camden, N. J	41,658	14	17.5			14						4									
Plainfield, N. J	8,126	4	26.0			4						2								1	
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	411	25.3	815,182	31,798	378	33					135				5		2		56	4
Pittsburgh, Pa	156,381	69	23.0	152,290	4,091	65	4					19	2			5				8	1
Erie, Pa	27,730	8	15.0									2				1		1			
Wilmington, Del	42,499	26	31.9			22	4					8	2							5	2
Baltimore, Md	332,190	151	23.7	278,487	53,703	122	29					48				2				13	8
District of Columbia	180,000	93	26.8	120,000	60,000	41	52	17.7	45.1			13	24			2	4			10	12
Norfolk, Va	21,966	12	28.5			7	5					4	4								1
Reading, Pa	43,280	14	16.8									4								3	
Lynchburg, Va	15,959	14	45.7			6	8					2	3							1	1
Wilmington, N. C	17,361	3	9.0				3						2								
Charleston, S. C	50,000	31	32.2			12	19					3	7							1	1
Augusta, Ga	23,023	16	36.1			9	7					2	3			1				1	1
Atlanta, Ga	37,421	13	17.9	21,086	16,335	6	7					2	3							2	
Savannah, Ga	30,681	22	37.4			8	14					3	5							1	4
Rome, Ga	5,000	1	10.4																		
Brunswick, Ga	2,900	4	72.0	1,500	1,400	4							2					1			
Jacksonville, Fla	8,000	5	32.6	5,000	3,000	4	1						1							4	
Key West, Fla	12,000	2	8.7				2						2								1
Mobile, Ala	31,295	16	26.7	16,837	14,368	8	8											1		2	
Selma, Ala	7,505	3	20.8			2	1													1	
Columbus, Miss	5,203	2	19.9	2,633	2,570		2						1								
Vicksburg, Miss	11,814	5	22.0			2	3					1									
New Orleans, La	216,140	122	29.4			78	44					21	10			1	2			10	8
Shreveport, La	11,017	7	33.1			3	4						3						1		1
Morgan City, La	2,018	3	77.4			2	1					2	1								
Baton Rouge, La	7,187	4	29.0				4						2								
San Antonio, Tex	20,561	11	28.2			10	1					4								3	1
Waco, Tex	8,000	6	39.0			4	2					1	1							1	1
Galveston, Tex	22,253	14	32.8			10	4					3	2					1			1
Brownsville, Tex	5,800	7	62.9			7						4									
Little Rock, Ark	13,185	8	31.6			6	2					4	1							1	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 19, 1881.

Cities and States	Croup. W.	Croup. C.	Diarrhœal diseases. W.	Diarrhœal diseases. C.	Diphtheria. W.	Diphtheria. C.	Erysipelas. W.	Erysipelas. C.	Fever. Typhoid. W.	Typhoid. C.	Malarial. W.	Malarial. C.	Scarlet. W.	Scarlet. C.	Acute lung diseases. Pneumonia. W.	Pneumonia. C.	Congestion of lungs. W.	Congestion of lungs. C.	Bronchitis, acute. W.	Bronchitis, acute. C.	Pleurisy. W.	Pleurisy. C.	Measles. W.	Measles. C.	Puerperal diseases. W.	Puerperal diseases. C.	Small-pox. W.	Small-pox. C.	Whooping-cough. W.	Whooping-cough. C.
Portland, Me.															1		1								1					
Bangor, Me.													1		2		2													
Concord, N. H.															1		1													
Burlington, Vt.																														
Boston, Mass.	7				12		4		2				1		20				9	1			8		2				1	
Cambridge, Mass.	1				1		2								4				1											
Edgartown, Mass.																														
New Bedford, Mass.															1	1														
Newburyport, Mass.															1		1								2					
Marblehead, Mass.															1															
Nantucket, Mass.																														
Plymouth, Mass.																														
Fall River, Mass.					1		1								2		1		3											
Lowell, Mass.	3				4				2						3				1											
Lawrence, Mass.	1		1		1										1										1					
Worcester, Mass.	1								1				2		2								1		2				1	
Lynn, Mass.	1																1		1											
Holyoke, Mass.																														
Bridgewater, Mass.					1				2		1				1															
Chicopee, Mass.					1		1																							
Fitchburgh, Mass.															3								1							
Somerville, Mass.					1		1								2				1											
Springfield, Mass.																														
Spencer, Mass.																														
Quincy, Mass.			1												1		1													
Northampton, Mass.																			1											
North Adams, Mass.																														
Haverhill, Mass.																														
Gloucester, Mass.					2																									
Chelsea, Mass.															1		1													
Clinton, Mass.															1															
Beverly, Mass.															1															
Attleborough, Mass.																														
Malden, Mass.															2															
Salem, Mass.					2														1											
Taunton, Mass.									1																					
Westboro', Mass.															1															
Woburn, Mass.															1				1											
Weymouth, Mass.																														
Waltham, Mass.																														
Webster, Mass.																														
Westfield, Mass.																														
Brookline, Mass.																														
Newton, Mass.	1				2																		1							
Providence, R. I.	3		1		1		1						2		8		1		2						2					
New Haven, Conn.					1		1								1															
New Britain, Conn.																														
Waterbury, Conn.															2															
Fairfield, Conn.																														
New York, N. Y.	31		10		40		10		3		7		49		97				51				4		12		5		2	
Brooklyn, N. Y.	6				33	1	6		1		1		18		19	1			10	3					8				1	
Yonkers, N. Y.																														
Poughkeepsie, N. Y.									2				1																	
Newburgh, N. Y.																														
Buffalo, N. Y.	2				2						1		1		10															
Cambridge, N. Y.																														
Seneca Falls, N. Y.																														
Tarrytown, N. Y.																														
Utica, N. Y.																														
Hudson County, N. J.	6				2		1		1		1		9		8		1		3						7		2			
Newark, N. J.	6		2		1		1		2						10				2								1			
Orange, N. J.																														
Camden, N. J.													1				2										1			
Plainfield, N. J.															2															
Asbury Park, N. J.																														
Philadelphia, Pa.	8				1		2		9				6		20	2	6		7	1							44	5	2	
Pittsburgh, Pa.	4		1		2				4				3		7		1	2	3						2		2			
Erie, Pa.									1						2										1					
Wilmington, Del.							1						1		1						1				1					
Baltimore, Md.	6		1		8	1	1		4				5		6	4	1		1			1	1		2				2	
District of Columbia.	3	2			1	1			2			2			6	7			1	2						2				
Norfolk, Va.					1										2															
Reading, Pa.			1										1		2															
Lynchburg, Va.						1										2	1													
Wilmington, N. C.									1						1	1	2	1												
Charleston, S. C.															2	3			1											
Augusta, Ga.		1													1	1														
Atlanta, Ga.	1		1	2						1		1																		
Savannah, Ga.																														
Rome, Ga.																1														
Brunswick, Ga.																														
Jacksonville, Fla.										1																				
Key West, Fla.															1															
Mobile, Ala.																														
Selma, Ala.																														
Columbus, Miss.																														
Vicksburg, Miss.																														
New Orleans, La.		1	6	2	3	1			1		1	1	5		3	6			2	3										
Shreveport, La.																														
Morgan City, La.				1																										
Baton Rouge, La.				1																										
San Antonio, Tex.	1		2								1																		1	
Waco, Tex.											1				1															
Galveston, Tex.															2		1	2												
Brownsville, Tex.											1																5			
Little Rock, Ark.														1	2		1													

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 19, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Nashville, Tenn	43,543	15	18.0	27,874	15,669	5	10					2	3								1
Memphis, Tenn	33,593	32	49.6			16	16					6	5				2		1	3	3
Clarksville, Tenn	7,250	2	14.5	4,000	3,250	1	1					1						1			
Murfreesboro', Tenn	3,850	1	13.8	2,000	1,850		1														
Louisville, Ky	123,675	42	17.7			29	13					12	8				1		1	3	1
Bowling Green, Ky	6,000	1	8.7	4,000	2,000		1														
Cincinnati, Ohio	255,708	102	20.8			98	4					48				2				16	
Cleveland, Ohio	160,140	63	20.5																	5	
Dayton, Ohio	38,677	19	25.4			18	1					6	1			1				2	
Gallipolis, Ohio	4,500																				
Portsmouth, Ohio	11,314	4	18.4			4						1									
Indianapolis, Ind	75,074	37	25.7			30	7					8						5	2	3	4
Richmond, Ind	12,743	1	4.1			1														1	
Evansville, Ind	29,280	12	21.3			9	3					6						2		1	
Chicago, Ill	503,298	205	21.2									93				6		3		15	
Peoria, Ill	29,315	15	26.7			15						2				2				5	
Aurora, Ill	11,825	3	13.2																		
Jacksonville, Ill	10,927	1	4.7			1						1									
Elgin, Ill	8,770	2	11.9			2						1									
Moline, Ill	8,000	1	6.5			1						1									
Rock Island, Ill	11,660	6	26.8			6						2								1	
Milwaukee, Wis	115,578	53	23.7									32				1				6	
Beloit, Wis	5,180																				
East Saginaw, Mich	19,016	9	34.6			9						4								1	
Flint, Mich	9,000	3	17.3			3												1			
Lansing, Mich	8,500	1	5.7			1														1	
Dubuque, Iowa	22,254	4	9.4			4															
Keokuk, Iowa	12,117	4	17.2			3	1						1								1
Davenport, Iowa	23,000	5	11.4									2									
Saint Louis, Mo	350,522	120	17.8			109	11					40	5			5		2		14	2
Omaha, Nebr	30,518	8	13.6			7	1					2	1					1		2	
Salt Lake City, Utah	20,768	7	17.6			7						6									
Boulder, Colo	3,030	1	17.2			1														1	
San Francisco, Cal	233,956	85	18.9									23				1				12	
Vallejo, Cal	7,000																				
Los Angeles, Cal	11,311	8	36.8			8						2								2	
Total	8,248,707	3,726	23.5									1,235	118			75	11	33	5	467	64

ABSTRACTS FROM CONSULAR REPORTS.

ALGIERS, AFRICA.—United States Commercial Agent Alex. Jourdan reports 182 deaths for three weeks ending January 30, in a population of 68,055; annual death-rate 46.5 per 1,000. From typhoid fever, 9 deaths are reported, but no epidemic disease prevails. Mean temperature 64°.

BORDEAUX, FRANCE.—For the month of December, United States Consul B. Gerrish reports 14 deaths from small-pox, 8 from typhoid fever, and 22 from other contagious diseases. Total deaths, 471; population, 215,140; annual death-rate 25.8 per 1,000. Of the decedents, 59 were under one year and 95 over 70 years of age. Consumption caused 66 deaths and other lung diseases 67.

GHENT, BELGIUM.—United States Consul A. Lefebvre sends a report for the year 1880, giving a total of 3,848 deaths and 165 stillbirths. There were 1,056 marriages and 4,438 births, of which 574 were illegitimate.

GUADALOUPE, WEST INDIES.—United States Consul Charles Bartlett reports, under date of February 5, that several cases said to be yellow fever had occurred on board of two French vessels in the port of Pointe à Pitre. He found on inquiry at the marine hospital that some mild cases had been under treatment there as yellow fever, but there was no apprehension that it would spread. No sickness among American vessels, and the town being free from contagious diseases, clean bills of health were still issued.

MADEIRA.—United States Consul Thomas B. Reid, under date of February 1, states that no reliable statistics can obtained from the authorities of Funchal, but that Dr. Goldschmidt, a German physician, will furnish a report of deaths on the island for the year 1880.

MARACAIBO, VENEZUELA.—United States Consul E. H. Plumacher, in his report for the month of January, states that no reliable information can be obtained as to mortality or disease. The city has a population of about 40,000, and is not in good sanitary condition, as no artificial provision whatever is made for drainage.

PALMA, CANARY ISLANDS.—United States Consul W. F. Lavers sends reports for two months. In November there were 12 deaths, giving an annual rate of 23.7; in December, 14 deaths; annual rate, 27.7 per 1,000. The causes of death are not stated. Sanitary condition good.

SANDWICH ISLANDS.—Under date of February 10, United States Consul F. P. Hastings reports that small-pox has recently appeared at Honolulu, and up to that date 40 cases had been reported. Quarantine measures had been enforced to prevent the disease from spreading to other islands. The contagion is supposed to have been introduced by emigrants from Canton, China.

The consul also forwards the report of Dr. Charles Neilson, who has succeeded Dr. Emerson as superintendent of the leper settlement on the island of Molokai. At the close of the year 1880 there were 609 persons in the settlement, and 161 had died during the year. Nine children were born of leprous parents, and 6 deaths occurred under one year of age. Dr. Neilson observes that efforts to improve the hygienic condition of the lepers meet with no aid from them, a marked feature of the disease being a condition of apathy and despondency. The government has made liberal provision for the afflicted, in providing good shelter and an ample supply of wholesome food. Among the remedies in use, an oleo-resinous substance, known in commerce as gurgun oil, is considered the most valuable, especially when combined with lime-water. The treatment is, however, empirical, and is addressed rather to special symptoms than to cure of the disease. Leprosy is regarded as undoubtedly contagious.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, MARCH 12, 1881. [No. 37.

F. P. FOSTER, M.D. 28th ST. N.Y.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

CHICAGO, ILL.—Dr. H. A. Johnson, member of the National Board of Health, under date of March 8, forwards the following report by a physician who has studied the subject of the epidemic of *winter cholera* which has prevailed in several western cities:

The epidemic of so-called winter cholera the present winter in Chicago is noteworthy as decidedly modifying the usual health condition of the city, and, also, for its own peculiarities. From all that can be learned from conversation with physicians it appears that it became suddenly prevalent about the holidays, though there are records of a rather unusual amount of diarrhœal trouble earlier in December. One of our leading druggists reports a notable increase in the number of prescriptions for diarrhœa and cholera mixtures early in December, but the marked increase occurred about the close of the month. At this time, and especially after a sudden cold spell that occurred then, the fact was so notable that it came to the ears of a reporter for the daily press and was duly inserted as an item of city news. From that time to the present the epidemic has continued with more or less violence, but now seems to be somewhat abating. It is not possible to even approximately estimate the degree of its prevalence with any certainty. The disorder has made no marked figure in the mortality reports, and there are no returns of non-fatal diseases. Judging from the number of cases mentioned to me by physicians as having come under their own observation and treatment, and allowing for the whole number in the city, as well as the very large probable number of cases where no physician was consulted, I should say that at least fifteen or twenty thousand cases have occurred; and perhaps thirty or forty thousand, of all degrees of mildness or severity, would be more nearly correct. In one of the principal suburbs, where it was easier to make an estimate, and where it was, to all appearances, much less prevalent than in the city, nearly two per cent. of the population were more or less affected. Here, too, according to the experience of some physicians, a majority of the cases were adult males, whose business carried them to the city every day.

The form of the disease varied in different cases. In many there was only a simple diarrhœa, much like that of the summer, and this was generally readily checked by medicines, or ceased of itself. Others suffered from a severer and more persistent diarrhœa, more or less frequent watery discharges from the bowels, causing, when frequent, great exhaustion, and even producing collapse if not attended to. It was very liable to recur after having been checked, and in a few cases, at least, appeared, when untreated, to be remittent, appearing a day or two and then ceasing for a similar period, and so on, but not with perfect regularity. Pain was often present, but not invariably; not, as a rule, much fever, except in children.

In still another class of cases, and these were quite numerous, there was with the diarrhœa more or less marked gastric disturbance, in some instances very severe, with excessive thirst and dryness of the mouth, great pain in the upper abdominal region, and often nearly all the symptons of acute gastro-enteritis. These latter were observed accompanied with obstinate constipation in a few cases, which nevertheless appeared to come otherwise under the general class described.

The following memoranda of the symptoms are furnished by Prof. J. A. C. Hollister of the Chicago Medical College, who treated personally over one hundred cases in his private practice.

"The two features that have attracted attention in this affection are the severity of the vomiting and the copious discharges from the bowels.

"The matters rejected from the stomach have usually given slight acid reaction, at the first consisting mainly of aliment and drinks, readily rejected, and then mucous secretion from the stomach sometimes tinged with bile, sometimes not. The alvine evacuations have been markedly of a serous character; a fact specially noted. In some cases the typical appearance of bilious diarrhœa, giving the stool a bright yellow color, in others an absence of bile. The discharges varying from a bright creamy color to those charactistic of cholera, only that in them I have not noticed coagulated albumen.

"The urine is usually rather scanty and high colored until the diarrhœa is controlled.

"The nervous system, aside from the sense of prostration, does not seem to manifest disturbance.

"The mucous secretion is partially arrested in the respiratory passages, and especially in the mouth and fauces.

"The capillary circulation of the skin varies, but there is no uniform marked disturbance of the circulation.

"The subjective symptoms are, in the order of their severity—

"1. Inordinate thirst, with dryness of tongue and fauces.

"2. More or less frequently recurring nausea, with vomiting.

"3. Tenderness over umbilical region covering region of small intestines.

"4. Quite frequently a sense of fullness and pain in the region of the liver, with sometimes excessive secretion, and at others seeming congestion, with arrest of biliary secretion.

"5. Fugitive pains in various parts of the body."

In the practice of some physicians the choleraic discharges were not observed, all the stools being characterized simply by the absence of bile. The implication of the liver function was a very common feature, and jaundice was produced in some of the severer cases.

The onset of the disease was usually sudden; patients in some extreme cases on rising in the morning felt only a slight dryness in the mouth, but found themselves unable to keep even a drink of water on the stomach. Generally, however, the onset, though sudden, was not so abrupt as this.

The duration of the disease was very variable—many even of the severer cases recovered within a few days, sometimes within a few hours under prompt treatment; others have lasted many weeks.

As after-effects, there have been observed, besides the jaundice already mentioned, subacute enteritis, dysentery, and ulceration of the rectum. In most cases a tendency to relapse was observed, and changes of weather were very influential in bringing this about, as well as influencing the course of the disease during its existence. Imprudence and exposure generally were thought to produce it or to aggravate it.

During the earlier weeks of the epidemic the disease appeared to be mostly confined to adults, but later children were also attacked to some extent, the trouble in them often taking the form of cholera infantum. Although it was said in the beginning that the epidemic made no marked figure in the mortality reports, corresponding with its prevalence, yet there have been one or two deaths reported from it, and it has been mentioned in connection with other diseases in a

number of death certificates. The number of deaths reported from cholera infantum has also been larger than usual at this season during the last few weeks. There is no doubt but that it has had its effect in increasing the mortality, though not very much can be attributed to it alone.

The nature and cause of the disease are not very manifest, according to observations in Chicago. Some physicians in large practice have had no cases except adults, and the majority males; others have found no reason to think that either age, sex, or occupation is a factor in its production. Previous conditions of health or debility also appear to make no figure in its causation; the majority of the patients were, it is probable, in a fair or robust health when attacked.

Popular opinion was at first inclined to attribute it to the excessive cold of the winter, and many physicians were inclined to share the opinion. Bad sewerage and ventilation could not be generally credited with its production, as it occurred equally where nothing was wrong in these respects. It is probable, however, that it was aggravated in some instances by bad sanitary conditions. The fact that the disorder occurred simultaneously in many widely-separated localities over the country is against the idea of any local conditions producing it—such as the drinking-water, which was constantly and carefully watched by Dr. DeWolf and the health officers without finding any marked impurity, notwithstanding the fact that the Fullerton avenue conduit was discharging from the North branch into the lake all winter. A number of physicians of extensive observation strongly suspected a malarial element in the disorder. In this connection I may state that a well-known physician from the interior of the State, Dr. Howard, of Champaign, has said that in his town he had seen a large number of cases of severe bowel complaint this winter in children, and very few in adults. In all, or nearly all, cases he found that the sufferers had been eating snow, and that the disease was apparently directly traceable to that. He also favored the idea of its malarial character, at least in part. The facts known are very suggestive, but it will require a much more extensive inquiry at a later period to justify any positive deductions.

The treatment of the disorder, as might be expected, is extremely various, but pretty uniformly successful. The only general practices, and these were not universal, were the employment of the mineral rather than the vegetable astringents, the use of opium in some form, and of bismuth. Most practitioners, it is probable, used mercury also in the commencement of the treatment of a case, on the theory that it would act on the disordered hepatic functions; some confined the medication almost entirely to the bismuth and pepsin, with careful dietary, and nearly all attached much importance to this last measure in the treatment of this disorder. Many used quinine in pretty fair doses, and some considered that its use was the best prophylactic against a relapse. In the beginning of the epidemic, cholera mixtures, such as Hamlin's, were much used, but later other measures were more in favor. The success in a greater or less degree of nearly all methods of treatment, directed on general principles to the condition, indicates the comparative manageableness of the disorder. Warm weather it is said was accompanied usually with an abatement of the disease, and it has apparently much decreased, at least in adults, since the middle of February. If we are not to attribute it to the extraordinary cold weather of the past winter, perhaps we may credit its docility to treatment to the same antiseptic condition.

As the epidemic is not entirely over it is too early to draw conclusions or to sum up observations that are yet of necessity incomplete. The above notes are offered simply as a sort of preliminary report, to be followed, it is to be hoped, at some future time by the results of a more complete investigation.

EVANSVILLE, IND.—Dr. J. W. Compton, under date of March 8, reports that cerebro-spinal meningitis is almost epidemic, and the cases are of the gravest type, having been generally fatal in from three to six days. An inclosed report of mortality in Evansville for the year 1880, gives the following among the principal causes of death: Diarrhœal diseases, 74; consumption, 102; other lung diseases, 71; measles, 27; scarlet fever, 37; typhoid fever, 55; diphtheria, 15; whooping cough, 5; accidents and injuries, 15. Total deaths, 632; excluding still and premature births, annual death-rate 21.5 per 1,000.

FAIRFAX C. H., VA.—Under date of March 8, Dr. R. W. Dorsey sends the following report of Fairfax County:

Since the subsidence of the malarial fevers that prevailed so generally in this section during the past summer and autumn, there has been very little sickness, except such as was caused by the intense cold of the past winter.

From diseases arising from this cause there has been a considerable fatality, particularly among the aged. During the last two months measles have been epidemic in the county, and there are still many cases. I have heard of no fatal cases so far.

One case of small-pox was reported some three weeks since, but upon proper inquiry it was decided to be erroneous. I have lately seen three cases of fever in a family near by, which in some particulars, strongly resembled typhus. The house occupied by this family is in a most unsanitary condition; the well from which their drinking water is obtained is also very foul, and there is good reason to believe that the water of the same is polluted by decomposing vegetable and animal matters.

The occurrence of a somewhat similar case of fever in a family adjoining the one alluded to, who use drinking water obtained from the same source, would suggest that possibly these cases originated from the same cause.

In accordance with the published request of the National Board of Health, these facts will be reported for the consideration of the proper analysts.

This is only one case of many that could be cited of the unsanitary state of premises in the rural districts, and points suggestively to the need of sanitary legislation for the benefit of every home in the land.

It is to be regretted that, beyond the localities protected by local sanitary laws, so few even of the medical profession are interested in public sanitation, and while this is the case, and while scarcely any of the masses of the people manifest an interest in the same, it can easily be seen that the nearest way to an improvement is by instituting a system of sanitary education, and the enactment and strict enforcement of special laws directed to this most important subject.

HAVANA, CUBA.—During the week ending February 25, 2 deaths from yellow fever and 16 from small-pox are reported. One of the deaths from yellow fever was in a military hospital, the other in the city.

NASHVILLE, TENN.—Dr. W. M. Clark, secretary of the State board of health, forwards the reports for forty-three places, as collected by the board. The remarks indicate an extensive prevalence of zymotic diseases during the month, but no high rate of mortality from any of them. Of 363 deaths reported, 98, or 27 per cent., were under 5 years of age, being a smaller proportion than the usual ratio for the whole country, which is about 35 per cent. Consumption has been prominent among the causes of death, and the increased mortality from this and other pulmonary diseases is ascribed to the inclement weather. The omission of estimates of population prevents any comparison of death-rates for the localities reporting.

SAINT ALBANS, VT.—March 9.—Dr. A. A. Hall reports no deaths during the week ending March 5. The village has about 6,000, and the whole town about 7,195 inhabitants.

WHEELING, W. VA.—Under date of March 9, Dr. T. O. Edwards states that the bill to establish a State board of health for West Virginia was passed March 8. Weekly reports will be sent from Wheeling.

WILMINGTON, N. C.—Under date of March 8, Dr. T. F. Wood reports a case of small-pox and 1 of varioloid as brought in on the vessel *Katie Collins*. The patients were transferred to the hospital for such diseases four miles from Wilmington.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

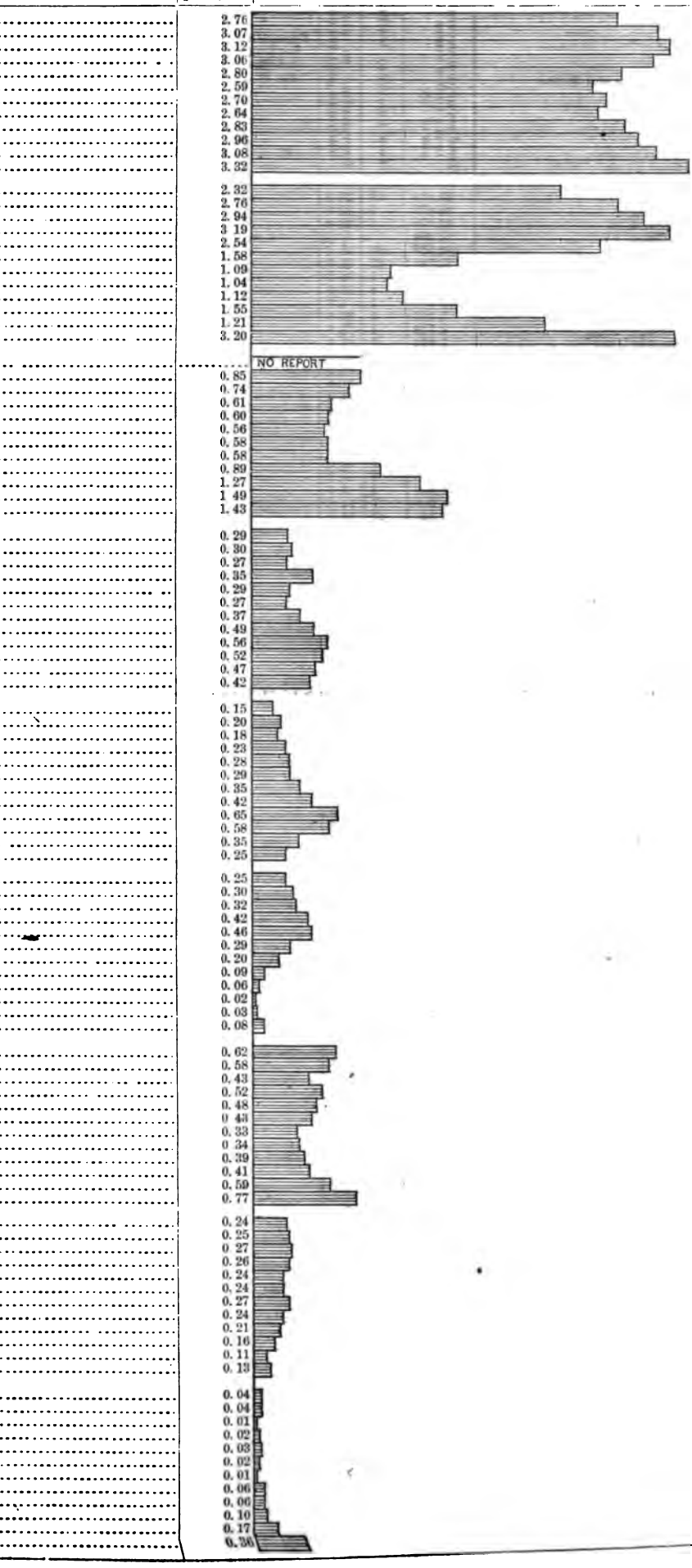
NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

MEAN DEATH-RATE PER ANNUM FOR EACH MONTH OF THE YEAR 1880, FOR NINE PRINCIPAL CAUSES OF DEATH.

(Based on a mean population of 8,100,000, sending regular weekly reports of mortality.)

Diseases.	Months.	Death-rate per 1,000.
Consumption	January	2.76
	February	3.07
	March	3.12
	April	3.06
	May	2.80
	June	2.59
	July	2.70
	August	2.64
	September	2.83
	October	2.96
	November	3.08
	December	3.32
Acute lung diseases	January	2.32
	February	2.76
	March	2.94
	April	3.19
	May	2.54
	June	1.58
	July	1.09
	August	1.04
	September	1.12
	October	1.55
	November	1.21
	December	3.20
Diphtheria	January	NO REPORT
	February	0.85
	March	0.74
	April	0.61
	May	0.60
	June	0.56
	July	0.58
	August	0.58
	September	0.89
	October	1.27
	November	1.49
	December	1.43
Enteric fever	January	0.29
	February	0.30
	March	0.27
	April	0.35
	May	0.29
	June	0.27
	July	0.37
	August	0.49
	September	0.56
	October	0.52
	November	0.47
	December	0.42
Malarial fevers	January	0.15
	February	0.20
	March	0.18
	April	0.23
	May	0.28
	June	0.29
	July	0.35
	August	0.42
	September	0.65
	October	0.58
	November	0.35
	December	0.25
Measles	January	0.25
	February	0.30
	March	0.32
	April	0.42
	May	0.46
	June	0.29
	July	0.20
	August	0.09
	September	0.06
	October	0.02
	November	0.03
	December	0.08
Scarlet fever	January	0.62
	February	0.58
	March	0.43
	April	0.52
	May	0.48
	June	0.43
	July	0.33
	August	0.34
	September	0.39
	October	0.41
	November	0.59
	December	0.77
Whooping cough	January	0.24
	February	0.25
	March	0.27
	April	0.26
	May	0.24
	June	0.24
	July	0.27
	August	0.24
	September	0.21
	October	0.16
	November	0.11
	December	0.13
Small-pox	January	0.04
	February	0.04
	March	0.01
	April	0.02
	May	0.03
	June	0.02
	July	0.01
	August	0.06
	September	0.06
	October	0.10
	November	0.17
	December	0.36



Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	14	21.5									1								3	
Bangor, Me	16,857	5	15.5																	1	
Concord, N. H	13,838	6	22.6									1									
Burlington, Vt	11,364																				
Boston, Mass	362,535	190	27.3			184	6					71	3			4	1	1		29	2
Cambridge, Mass	52,740	22	21.5			22						8								5	
Edgartown, Mass	1,300	1	40.1			1															
New Bedford, Mass	26,875	8	15.5			8						1								2	
Newburyport, Mass	13,537	2	7.7			2						2						1			
Marblehead, Mass	7,467	5	34.9			5						1								1	
Nantucket, Mass	3,726	1	13.8			1															
Plymouth, Mass	7,094	1	7.3			1						1									
Fall River, Mass	49,006	30	31.9									9				1				3	
Lowell, Mass	59,485	25	21.9			25						6								7	
Lawrence, Mass	39,178	24	31.9			24						9						3		5	
Worcester, Mass	58,295	16	14.3			16						9						2		2	
Lynn, Mass	38,284	15	20.4			15						8								2	
Brockton, Mass	13,608	6	22.9									2				1				1	
Holyoke, Mass	21,851	12	28.6									3								1	
Bridgewater, Mass	3,620	2	28.8			2															
Milford, Mass	9,310	6	33.6			6						1						1		1	
Chicopee, Mass	11,323	2	9.2			2						1									
Fitchburgh, Mass	12,405	2	8.4			2														1	
Somerville, Mass	24,985	7	14.6			7						1								1	
Springfield, Mass	33,340	12	18.7									5								1	
Spencer, Mass	7,466	4	27.9			4						3									
Quincy, Mass	10,529	3	14.8			3						1								2	
Northampton, Mass	12,172	2	8.7			2															
North Adams, Mass	10,192	6	30.8			6						1								1	
Haverhill, Mass	18,475	6	16.9			6						2								1	
Gloucester, Mass	19,329	10	27.4			10						7						1			
Chelsea, Mass	21,785	11	26.1			11						2								2	
Clinton, Mass	8,030	1	6.5			1														1	
Beverly, Mass	8,445	4	25.2			4														1	
Attleborough, Mass	11,109	3	13.9			3						1									
Malden, Mass	12,017	4	17.4			4												2			
Salem, Mass	27,500	14	26.3									2								3	
Taunton, Mass	21,200	9	21.8			9						4				1					
Westboro', Mass	5,217	2	19.9			2						2									
Woburn, Mass	10,982																				
Weymouth, Mass	10,571	5	24.7			5						1								1	
Waltham, Mass	11,711	2	8.8			2						1								1	
Webster, Mass	5,696	2	18.3			2										1					
Newton, Mass	17,000	10	30.2			10						1								2	
Providence, R. I	104,850	39	19.4			34	5					12	2			1				5	1
New Haven, Conn	62,882	19	15.7			19						8								1	
New Britain, Conn	13,978	8	29.8			8						2								2	
Waterbury, Conn	20,269	5	12.8			5						1								1	
Fairfield, Conn	3,476	1	15.0			1															
New York, N. Y	1,206,577	694	30.0			671	23					284				21		7		96	
Brooklyn, N. Y	566,689	279	25.7			275	4					118	1			6	1			28	
Yonkers, N. Y	18,892	4	11.0			4															
Poughkeepsie, N. Y	20,207	7	18.0															1		1	
Newburgh, N. Y	18,050	6	17.3			6						1									
Buffalo, N. Y	155,137	55	18.5			55						23				1				9	
Binghamton, N. Y	17,315	6	18.0									5									
Cambridge, N. Y	1,850																				
Seneca Falls, N. Y	6,000	1	8.7			1														1	
Tarrytown, N. Y	3,270	1	15.9			1															
Utica, N. Y	33,913	7	10.7																	1	
Hudson County, N. J	187,950	90	25.0									4								10	
Newark, N. J	136,400	50	19.1									33				3		1		11	
Camden, N. J	41,658	10	12.5			49	1					20								7	
Plainfield, N. J	8,126	3	19.5			7	3					3	2							1	
Asbury Park, N. J	1,640					3						2									
Philadelphia, Pa	846,980	369	22.7									122				3		2		45	1
Pittsburgh, Pa	156,381	60	20.0			349	20													7	
Erie, Pa	27,730	8	15.0			58	2					26				6					
Reading, Pa	43,280	13	15.7			8						4				2		1		1	
Wilmington, Del	42,499	21	25.7			13						5								1	
District of Columbia	180,000	96	27.8			19	2					6	1					1		2	
Norfolk, Va	21,966	11	26.0			54	42					13	21			1	3			12	9
Richmond, Va	63,803	27	22.0			6	5						3								
Lynchburg, Va	15,959	10	32.7			8	19					3	6							1	7
Charleston, S. C	50,000	27	28.0			4	6					1	3							1	
Augusta, Ga	23,023	10	22.6			13	14					1	4							1	1
Atlanta, Ga	37,421	20	27.5			4	6					2	2								1
Savannah, Ga	30,681	23	39.1			10	10					2	1			1	1				1
Rome, Ga	5,000	3	31.3			5	18						11				1			1	1

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 26, 1881.

Cities and States.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me.	1				1				1																						
Bangor, Me.																									1						
Concord, N. H.	1														2				1												
Burlington, Vt.																															
Boston, Mass.	5		1		16		2		5	1			1		18	1			8		2		4	1	7				2		
Cambridge, Mass.					1										4		1		1						1						
Edgartown, Mass.																															
New Bedford, Mass.															2																
Newburyport, Mass.																															
Marblehead, Mass.					1																				1						
Nantucket, Mass.																															
Plymouth, Mass.															1																
Fall River, Mass.					2										3				2				1		1						
Lowell, Mass.		2													2								1		1						
Lawrence, Mass.	1		1		1				1						1										1						
Worcester, Mass.													1		6														1		
Lynn, Mass.															4																
Brockton, Mass.		2																													
Holyoke, Mass.									1						5		1														
Bridgewater, Mass.																															
Milford, Mass.																			1										1		
Chicopee, Mass.											1																				
Fitchburgh, Mass.																															
Somerville, Mass.					1										1																
Springfield, Mass.					1														2												
Spencer, Mass.		1			1																										
Quincy, Mass.																															
Northampton, Mass.															1																
North Adams, Mass.											1				1				1												
Haverhill, Mass.		1															1														
Gloucester, Mass.	1																														
Chelsea, Mass.					2										3						1										
Clinton, Mass.																															
Beverly, Mass.																															
Attleborough, Mass.		1																													
Malden, Mass.															1										1						
Salem, Mass.															2																
Taunton, Mass.	1														2										1						
Westboro', Mass.		1																							1						
Woburn, Mass.									1																						
Weymouth, Mass.																			1												
Waltham, Mass.																															
Webster, Mass.	1																														
Newton, Mass.					2										1		1		1												
Providence, R. I.	1		2		1		1		1	1			1		6				2				1								
New Haven, Conn.											1				2				3												
New Britain, Conn.											1																1				
Waterbury, Conn.																															
Fairfield, Conn.																															
New York, N. Y.	25		7		36		6		3		11		43		96				44				6		20		7		4		
Brooklyn, N. Y.	13		2		25		3						22		33				12		1				7		2		3		
Yonkers, N. Y.															2											1					
Poughkeepsie, N. Y.			1										1																		
Newburgh, N. Y.																									1						
Buffalo, N. Y.	2		1		7						1		1		7				1										1		
Binghamton, N. Y.	1	1											3		1																
Cambridge, N. Y.																															
Seneca Falls, N. Y.																															
Tarrytown, N. Y.																															
Utica, N. Y.															1		1		2												
Hudson County, N. J.	6				1						3		3		9		1		1						3		1				
Newark, N. J.	2		1		3								4		7						1										
Camden, N. J.																1	1										2	1			
Plainfield, N. J.	1																														
Asbury Park, N. J.																															
Philadelphia, Pa.	1				7		4						6		30	2	6		7		1				1		37	7	1		
Pittsburgh, Pa.	1				2								6		3		1		1		1						2	2			
Erie, Pa.															1				1												
Reading, Pa.	1												2		1																
Wilmington, Del.					2				1				1																1		
District of Columbia.					3	1			1		1	4		1	5	4	1	2		2			2		1	1					
Norfolk, Va.					1										2	2				1											
Richmond, Va.	1			1											2	1		1					1						1		
Lynchburg, Va.																									1						
Charleston, S. C.										1						2	1	1		1											
Augusta, Ga.									1		1				1	2															
Atlanta, Ga.																2	2	1							1						
Savannah, Ga.									3	1						2															
Rome, Ga.				1																											
Brunswick, Ga.																															
Jacksonville, Fla.													2		1																
Key West, Fla.				1																											
Mobile, Ala.															1																
Selma, Ala.															2																
Natchez, Miss.													1																		
Columbus, Miss.																															
Vicksburg, Miss.																															
New Orleans, La.	2		1	3	5	1					4	1	3	1	3	4			3	2			3								
Shreveport, La.																															
Baton Rouge, La.																										1					
Morgan City, La.																															
San Antonio, Tex.															1														1		
Galveston, Tex.													1																		
Brownsville, Tex.																											7				
Marshall, Tex.																	1														
Little Rock, Ark.														1		1						1									

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 26, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Nashville, Tenn	43,461	22	26.4	.....	.....	11	11	.....	.....	.....	.....	5	5	.....	.....	.....	.....	.....	.....	.....	1
Memphis, Tenn	33,593	23	35.6	.....	.....	10	13	.....	.....	.....	.....	2	5	.....	.....	...	...	.....	.....	1	2
Clarksville, Tenn	7,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murfreesboro', Tenn	3,800	2	27.6	.....	.....	1	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Bowling Green, Ky	6,000	2	17.3	.....	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....
Cincinnati, Ohio	255,708	117	23.8	.....	.....	105	12	.....	.....	.....	.....	35	1	.....	.....	1	.....	1	.....	30	2
Cleveland, Ohio	160,140	58	18.9	.....	.....	58	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	7	.....
Dayton, Ohio	38,677	11	14.7	.....	.....	11	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	2	.....
Gallipolis, Ohio	4,500	1	11.6	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portsmouth, Ohio	11,314	5	23.0	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Indianapolis, Ind	75,074	34	23.6	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	1	2	2	2
Evansville, Ind	29,280	12	21.3	.....	.....	8	4	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	1
Richmond, Ind	12,743	5	20.4	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Chicago, Ill	503,304	211	21.8	.....	.....	211	.....	.....	.....	.....	.....	98	.....	.....	.....	4	.....	4	.....	16	.....
Peoria, Ill	29,315	14	24.9	.....	.....	14	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	2	.....
Aurora, Ill	11,825	1	4.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Jacksonville, Ill	10,927	5	23.8	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Elgin, Ill	8,770	4	23.8	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline, Ill	8,000	3	19.5	.....	.....	3	.....	.....	.....	.....	.....	2	.....	.....	.....	...	...	2	.....	.....	.....
Rock Island, Ill	11,600	6	26.1	.....	.....	6	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee, Wis	115,578	46	20.7	.....	.....	46	.....	.....	.....	.....	.....	24	.....	.....	.....	2	.....	1	.....	5	.....
East Saginaw, Mich	19,016	4	11.0	.....	.....	4	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flint, Mich	9,000	1	5.8	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Dubuque, Iowa	22,254	3	7.0	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Keokuk, Iowa	12,117	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Louis, Mo	350,522	136	20.2	.....	.....	120	16	.....	.....	.....	.....	47	5	.....	.....	4	.....	1	.....	15	3
Kansas City, Mo	60,000	19	16.5	.....	.....	19	.....	.....	.....	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	3	.....
Lawrence, Kans	8,500	6	36.0	.....	.....	4	2	.....	.....	.....	.....	4	2	.....	.....	.....	.....	.....	.....	.....	1
Omaha, Nebr	30,518	7	12.0	.....	.....	7	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	1	.....
Boulder, Colo	3,030	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salt Lake City, Utah	20,768	11	27.6	.....	.....	11	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	2	.....
San Francisco, Cal	233,956	78	17.4	.....	.....	.....	.....	.....	.....	.....	.....	22	.....	.....	.....	2	.....	.....	.....	12	.....
Sacramento, Cal	21,420	3	7.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Los Angeles, Cal	11,311	5	23.0	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	1	.....
Vallejo, Cal	7,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	7,928,630	3,541	23.2	.....	.....	.....	.....	.....	.....	.....	.....	1,181	106	.....	.....	75	7	39	5	461	53

ABSTRACTS FROM CONSULAR REPORTS.

BORDEAUX, FRANCE.—United States Consul B. Gerrish reports for the month of January, 12 deaths from small-pox, 17 from typhoid fever, and 29 from other contagious diseases. Consumption caused 88 deaths, other lung diseases 63, and brain diseases 51. The total mortality was 544; population, 215,140; annual death-rate 29.7 per 1,000.

CEYLON.—United States Consul W. Morey, inclosing a series of meteorological observations for 1880, observes that his district has remained free from epidemic or contagious diseases during the year.

GHENT, BELGIUM.—United States Consul A. Lefebvre reports for the month of January, 3 deaths from typhoid fever, 7 from scarlet fever, and 1 from diphtheria. Consumption caused 49 deaths, bronchitis and pneumonia 65, and diarrhœal diseases 32. Total mortality, 305; population, 130,670; annual death-rate, 27.5 per 1.000.

GIBRALTAR, SPAIN.—United States Consul H. J. Sprague sends a report for the year 1880, showing a total of 382 deaths in a population of 18,000; annual death-rate, 21.2 per 1,000. No deaths from exanthemata appear on the list. Of 23 cases reported as small-pox, at least 20 proved to be varioloid. Of 22 cases of enteric and other fevers, 9 were from the vessels arriving in port. The deaths from lung diseases were only 77, against 127 for 1879, and the general health of the civil population has been remarkably good during the year.

GUADALOUPE, WEST INDIES.—United States Consul Charles Bartlett, under date of February 12, reports that yellow fever has increased in the port of Pointe à Pitre. Four French vessels have most of their crews in hospital, and the disease has appeared on three other vessels. About 30 cases were supposed to exist in the hospital and shipping. The troops have all been removed to the mountains. The last clean bills of health were issued to schooner *Timothy Field*, for Key West, February 7, and brig *Favorite*, for New York, February 8. The consul remarks that these bills would not have been given had he been fully informed as to the extent of the fever at that time. An appropriation has been made for improvement of the sanitary condition of the city.

GUAYMAS, MEXICO.—United States Consul A. Willard forwards the local report of mortality for January, showing a total of 11 deaths, of which 4 were under 5 years of age. Eight deaths are ascribed to "fever," presumed to be malarial. The general sanitary condition is good, the annual death-rate being 24 per 1,000, and no epidemic prevailing.

MATAMOROS, MEXICO.—United States Consul W. P. Sutton, under date of February 19, reports 10 deaths from small-pox during the preceding week. He also incloses a printed copy of resolutions adopted by the leading physicians of Brownsville, Tex., having in view the suppression and prevention of small-pox. The first resolution provides for compulsory vaccination and house-to-house medical inspection. It is noted that one of the Spanish (or Mexican) physicians signs the paper with a record of dissent from the first resolution.

MELBOURNE, AUSTRALIA.—United States Consul O. M. Spencer reports for the month of November, 3 deaths from cholera, 6 from typhoid fever, and 14 from other contagious diseases. Total mortality, 445; population, 265,000 (including suburbs); annual death-rate. 20.0 per 1,000.

ST. THOMAS, WEST INDIES.—United States Consul Victor Thompson desires a correction of the word *epidemic*, as applied to yellow fever in St. Thomas, reported in No. 28 of the BULLETIN. The disease was described as prevailing at the time and as *endemic*, but not considered *epidemic*.

SYDNEY, AUSTRALIA.—The report of the registrar-general being based upon the population of 1871, can not give any accurate estimate of relative mortality for the current year. During the month of November, 1880, the births were 329 and the deaths 300 in the city. Zymotic diseases furnished 28 per cent. of the deaths, measles and diarrhœa being the most fatal. Including the suburbs, 727 births, and 574 deaths are reported, the proportion under 5 years being 64 per cent. of all deaths in the city, and 67.5 per cent. for the suburbs and city together.

HAVANA, CUBA.—During the month of February there were 5 deaths from yellow fever and 89 from small-pox. For the week ending March 4, no deaths from yellow fever are reported, but 31 occurred from small-pox. The American bark *Esther* had 2 cases of small-pox among her crew. Both were sent to the hospital, where 1 died. The rest of the crew were vaccinated and the vessel disinfected.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING FEBRUARY 26, 1881—Continued.

Cities and States.	Cholera.		Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		Fever. Typhoid.		Fever. Malarial.		Fever. Scarlet.		Acute lung diseases. Pneumonia.		Acute lung diseases. Congestion of lungs.		Acute lung diseases. Bronchitis, acute.		Acute lung diseases. Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Nashville, Tenn.																						1			3	2						1
Memphis, Tenn.					1					1			1	2	1		2	1														
Clarksville, Tenn.																																
Murfreesboro', Tenn.																		1														
Bowling Green, Ky.																					3	1										1
Cincinnati, Ohio.	1	1	1		2		2		2		1				3		15	1	2	1	2						2					
Cleveland, Ohio.			3		2						1				2		1		1		1										1	
Dayton, Ohio.					1																											
Gallipolis, Ohio.																																
Portsmouth, Ohio.																	1				1											
Indianapolis, Ind.													2		1		1	1	1													
Evansville, Ind.											1						5	3														
Richmond, Ind.																	1		1								1					
Chicago, Ill.	4		4		9		6		7		1		8		18		4		15		1				4		8		3			
Peoria, Ill.			1										2		2																	
Aurora, Ill.																																
Jacksonville, Ill.																									1							
Elgin, Ill.																											1					
Moline, Ill.																	1															
Rock Island, Ill.			1								1								1								1					
Milwaukee, Wis.	1		1		1		1								5		5		1						1		2					
East Saginaw, Mich.																			2													
Flint, Mich.																																
Dubuque, Iowa.																	1															
Keokuk, Iowa.																																
Saint Louis, Mo.	4		1	1	1		3	1	3		8	3			9	1			5						2		3				1	
Kansas City, Mo.					3		1								4																	
Lawrence, Kans.					3				1							1																
Omaha, Nebr.	1													1																		
Boulder, Colo.																																
Salt Lake City, Utah.					2		1		1						1																	
San Francisco, Cal.			1								1		1		7		1		1		2								1			
Sacramento, Cal.															1																	
Los Angeles, Cal.			1								1																					
Vallejo, Cal.																																
	80	3	43	8	150	2	32	3	56	4	29	10	125	3	352	34	33	6	124	8	8	1	26	3	66	2	68	11	20	2		

CORRECTION.

The report of total deaths in the District of Columbia, in the table of mortality for the year 1880, No. 34 of the BULLETIN, should be 4,122 for the 52 weeks ending January 1, 1881. The corresponding annual death-rate, for a population of 180,000, would be 22.9 per 1,000.

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TULLIO S. VERDI, M. D., &c., 815 14th st., N. W., Washington, D. C.

The following reports for the week ending February 26, are from places in which burial permits are not required:

Alexandria, Va., 13,000; deaths, 6; under 5 years, 1; consumption 3, puerperal 1. Allegheny, Pa., 78,000; deaths, 25; under 5 years, 11; consumption 1, croup 1, diphtheria 2, typhoid fever 3, scarlet fever 1, pneumonia 5, bronchitis 1. Bath, Me., 8,000; deaths, 2; consumption 1. Belfast, Me., 5,308; deaths, 2; consumption 1, pneumonia 1. Brattleborough, Vt., 6,000; no deaths. Bucyrus, Ohio, 3,950; consumption 1. Calais, Me., 6,162; deaths, 6; consumption 2, congestion of lungs 1. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 5,996; no deaths. Clinton, Mich., 1,200; no deaths. Corinth, Miss., 2,264; no deaths. Columbus, Ga., 10,000; deaths, 3; under 5 years, 2; accident 1, pneumonia 1. Crystal Springs, Miss., 955; no deaths. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Galesburg, Ill., 11,500; pneumonia 2. Gunn City, Mo., 125; no deaths. Helena, Mont., 3,630; diphtheria 2; under 5 years, 1. Hernando, Miss., 1,000; one death. Huntingdon, Pa., 4,500; scarlet fever 1; under 5 years. Huntingdon, Tenn., 1,200; whooping-cough 1; under 5 years. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,250; deaths 2; consumption 1. La Salle, Ill., 8,885; deaths, 4; under five years, 2; consumption 2, typhoid fever 1, pneumonia 1. Louisiana, Mo., 5,000; deaths, 2; under 5 years; cerebro-spinal meningitis 1, pneumonia 1. Macon, Ga., 13,000; deaths, 4; under 5 years, 1; consumption 1, pneumonia 1, pleurisy 1, old age 1. Madison, Ind., 9,000; deaths, 3. Marquette, Mich., 4,000; deaths, 2; old age 1. Martinsburg, W. Va., 6,384; deaths, 5; under 5 years, 1; diarrhœa 1. Meridian, Miss., 4,013; deaths, 2; accident 1, pneumonia 1. Milan, Tenn., 1,800; deaths, 2; under 5 years, 1; pneumonia 1. Milledgeville, Ga., 3,000; no deaths. Mount Pleasant, Iowa, 4,500; one death. Muscatine, Iowa, 8,400; deaths, 3; consumption 1, scarlet fever 2. Muskegon, Mich., 11,300; deaths, 2; diarrhœa 1, erysipelas 1. Nebraska City, Nebr., 5,000; deaths, 4; under 5 years, 1; accidents 2, consumption 1, diphtheria 1. Niles, Mich., 4,200; one death. Okolona, Miss., 3,000; no deaths. Painesville, Ohio, 5,500; deaths, 3; under 5 years, 1; accident 1, congestion of lungs 1, old age 1. Pearlington, Miss., 1,200; puerperal 1. Pass Christian, Miss., 2,000; no deaths. Phœnixville, Pa., 6,692; consumption 1, puerperal 1. Pleasant Hill, Miss., 243; no deaths. Port Gibson, Miss., 1,200; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, Cal., 5,000; no deaths. Senatobia, Miss., 1,000; consumption 1. Starkville, Miss., 1,454; deaths, 2; under 5 years, 1; bronchitis 1. Springfield, Ohio, 21,000; deaths, 8; under 5 years, 2; consumption 1, puerperal 1, diphtheria 2, typhoid fever 2, old age 2. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,000; deaths 2; under 5 years 1, from whooping-cough. Tuscaloosa, Ala., 2,000; no deaths. Winchester, Va., 5,000; old age 1. Winona, Minn., 10,000; deaths, 8; under 5 years, 3; cerebro-spinal meningitis 1, diphtheria 3, malarial fever 1, puerperal 2. Youngstown, Ohio, 15,089; deaths, 6; under 5 years, 1; pneumonia 2, bronchitis 1, puerperal 1. Total population, 344,356; deaths under 5 years, 33; total number of deaths, 122; annual rate per 1,000, 18.5.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1880–'81.															
Vancouver's Island.	Victoria	5,000	Feb. 19	2	20.8													41
Canada	Montreal	135,000	Feb. 12	64	24.7								2				6	31
Do	...do	135,000	Feb. 19	68	26.2								2				11	18
Do	Port Sarnia		Feb. 27															
Cuba	Havana	195,437	Feb. 19	133	35.5				1		23		1					74
Mexico	Vera Cruz	20,000	Feb. 13	35	92.4				9		2							76
Do	Manzanillo	800	Jan. 5	3	195.0													
Do	...do	800	Jan. 12	2	130.0													
Central America	Aspinwall	2,500	Feb. 19	1	20.9													85
Do	Panama	12,000	Feb. 19	4	17.4			1	1	4								80
South America	Rio de Janeiro	330,000	Feb. 3	202	31.9				6		2		4					
Canary Islands	Las Palmas	18,000	Feb. 5	11	31.8													
Ireland	Queenstown	10,000	Feb. 19	9	47.0													
Do	Belfast	230,000	Feb. 12	135	30.6								3				2	
Scotland	Dundee	155,100	Feb. 12	62	20.8										1	5		33
Do	Leith	59,958	Feb. 19	30	26.4								1				3	37
England	London	3,707,130	Feb. 12	1,633	22.9						52		10				90	39
Do	Liverpool	549,834	Feb. 19	273	25.9							2	3	17	4	30	17	40
Do	Bristol and Clifton	213,500	Feb. 12	89	21.7								2				9	40
Do	Tunstall	27,775	Feb. 19	15	28.1								1				1	41
France	Rouen	104,209	Feb. 19	54	26.4													
Do	Lyons	342,815	Jan. 29	228	34.6						14		8		5			
Do	...do	342,815	Feb. 5	193	29.3						14		3				3	
Switzerland	Zurich		Feb. 12	14														
Holland	Amsterdam	316,952	Feb. 12	177	29.1												9	37
Germany	Berlin	1,123,570	Feb. 5	507	23.5							21	6	1		140	63	38
Do	Barmen	95,000	Feb. 12	41	22.9												1	40
Do	Bremen	112,200	Jan. 29	42	19.6												5	
Do	...do	112,200	Feb. 5	45	20.9												4	
Do	Breslau	273,000	Feb. 5	156	29.7													34
Do	Brunswick	74,000	Feb. 12	28	19.7										5			48
Do	Cologne	144,537	Feb. 12	67	24.2								2				10	
Do	Frankfort	137,000	Feb. 5	48	18.3												2	39
Do	...do	137,000	Feb. 12	64	24.4												2	42
Do	Mannheim	53,500	Feb. 19	14	13.6													34
Bavaria	Munich	230,000	Feb. 5	136	30.8						1						2	
Do	...do	230,000	Feb. 12	135	30.6						1		2					
Do	Nuremberg	99,475	Jan. 22	56	29.1								1				9	16
Do	...do	99,475	Jan. 29	45	23.4												9	22
Do	...do	99,475	Feb. 5	69	35.9												10	37
Saxony	Dresden	220,216	Feb. 5	127	30.4							1	1			10	10	36
Do	...do	220,216	Feb. 12	102	24.5							1	1			9	9	36
Do	Leipsic	149,000	Feb. 12	53	18.5													34
Do	...do	149,000	Feb. 19	67	23.4													25
Do	Chemnitz	101,115	Jan. 29	46	23.4												2	18
Do	...do	101,115	Feb. 5	52	26.5												8	37
Do	...do	101,115	Feb. 12	46	23.5												6	31
Italy	Rome	305,469	Jan. 22	155	26.5						6		6				14	46
Do	Carrara		Feb. 15	10													3	
Austria	Trieste	128,295	Jan. 22	719	48.3												2	
Do	...do	128,295	Jan. 29	124	50.5						2		1				3	
Do	...do	128,295	Feb. 5	129	52.5						2		2					
Do	Vienna	731,277	Feb. 12	468	33.4						27		2				13	
Do	Buda-Pesth	370,037	Jan. 29	250	35.2						11		2				12	
Russian Poland	Warsaw	357,169	Feb. 5	157	22.9						1							29
Sweden	Stockholm	169,423	Jan. 29	93	28.6								1				9	21
Do	...do	169,423	Feb. 5	93	28.6								1				13	22
Norway	Christiania	120,000	Feb. 5	52	22.6						1						8	23
Egypt	Alexandria	220,000	Feb. 12	147	34.8													
Barbary	Tripoli	20,000	Feb. 5	4	10.4													60
Do	...do	20,000	Feb. 12	7	18.2													63
Africa	Cape Colony	35,000	Jan. 31	23	34.2													58
East Indies	Calcutta	429,535	Jan. 15	278	33.7		14				2		13					62
Do	...do	429,535	Jan. 22	288	34.9		10				4		12				1	61
Japan	Kobe	19,248	Jan. 22	9	24.5													
Do	...do	19,248	Jan. 29	10	27.2													
Do	...do	19,248	Feb. 5	7	19.0													

National Board of Health

BULLETIN.

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MONTHLY REVIEW FOR FEBRUARY, 1881.

The increase of population represented during the four weeks ending February 26 has been chiefly in the Northeast section, and the mean for this month is 8,080,122, being an addition of 524,832 to that of January. A rise of only 1 per cent. is observed in the general death-rate, but that of children under 5 years has increased from 7.62 to 8.40, or 9 per cent. since January. It is seen that at least one-half of the principal diseases show no appreciable change in their death-rates, as compared with those of last month, excepting the spread of small-pox, which is still too imperfectly reported to give any value to anestimate of its relation to other diseases on the list of mortality.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Feb. 5, 1881	7,988,195	3,710	24.23	1,270	8.30	34.25	1,096	7.15	29.54	561	3.66	15.12	535	3.49	14.42	278	1.81	7.49	187	1.22	5.04
Feb. 12, 1881	8,133,879	3,636	23.32	1,293	8.29	35.56	1,069	6.86	29.40	506	3.25	13.92	563	3.61	15.48	253	1.63	7.01	173	1.11	4.76
Feb. 19, 1881	8,269,782	3,726	23.51	1,351	8.52	36.26	1,110	7.00	29.74	531	3.35	14.23	579	3.65	15.51	270	1.70	7.23	154	0.97	4.13
Feb. 26, 1881	7,928,630	3,540	23.30	1,288	8.48	36.38	1,079	7.10	30.48	513	3.37	14.48	566	3.73	16.00	235	1.55	6.64	152	1.00	4.30
Totals	32,320,486	14,612	.....	5,202	.....	.....	4,354	.....	.....	2,111	.....	.....	2,243	.....	.....	1,038	.....	.....	666	.....	.....
Means	8,080,122	3,653	23.60	1,300½	8.40	35.59	1,088½	7.02	29.80	527½	3.40	14.44	560½	3.62	15.36	259½	1.65	7.10	166½	1.05	4.55

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Feb. 5, 1881	91	0.59	2.45	135	0.88	3.64	56	0.36	1.51	46	0.30	1.24	12	0.08	0.33	18	0.12	0.48	36	0.23	0.97	75
Feb. 12, 1881	82	0.52	2.25	126	0.81	3.46	57	0.36	1.57	51	0.33	1.40	24	0.15	0.66	29	0.18	0.80	32	0.20	0.88	78
Feb. 19, 1881	116	0.73	3.11	132	0.83	3.54	55	0.35	1.47	54	0.34	1.44	19	0.12	0.51	16	0.10	0.43	24	0.15	0.64	76
Feb. 26, 1881	83	0.55	2.34	128	0.84	3.62	48	0.32	1.36	60	0.39	1.70	29	0.19	0.82	22	0.14	0.62	48	0.32	1.36	79
Totals	372	.....	.....	521	.....	.....	216	.....	.....	211	.....	.....	84	.....	.....	85	.....	.....	140	.....	.....	308
Means	93	0.60	2.55	130¼	0.84	3.56	54	0.35	1.48	52¾	0.34	1.44	21	0.14	0.57	21¼	0.14	0.58	35	0.23	0.96	77

Causes of death.—The two principal diseases have nearly balanced each other in their oscillation this month, consumption having fallen 2 per cent., while acute lung diseases have risen 3 per cent. The most marked changes are observed in diphtheria and croup, which have decreased respectively 18 and 17 per cent. The other zymotic diseases which show increased mortality are whooping-cough, which has risen 17 per cent., and malarial fevers, which are 15 per cent. higher than last month. Neither of these, however, give a death-rate above 0.23 per 1,000. The remaining diseases of this class, while showing slight changes in different sections, have preserved their general rate of mortality unaltered since January. Small-pox continues to attract attention by its rapid spread over the country, the Southeast section, excepting Texas, being alone exempt at present. The quarantine physician of New York has pointed out the danger arising from the fact that the transit to this country from Europe now occupies a shorter time than the period of incubation of the disease, and shows the importance of detaining emigrants a sufficient time under observation. In the absence of such precaution, small-pox is liable to appear in persons after landing in apparent health, and to be disseminated along the great routes leading from the Atlantic ports to the West. The danger constantly menacing this country with infection from Canada and from Mexico has been frequently mentioned.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,810,920	8,977	24.34	2,737	7.42	30.49	1,302	3.53	14.50	1,435	3.89	15.99	765	2.07	8.52	502	1.36	5.59
Southeast	1,276,192	2,567	26.24	743	7.59	28.94	399	4.08	15.54	344	3.51	13.40	96	0.98	3.74	58	0.59	2.23
Northwest	1,762,398	2,760	20.42	779	5.76	28.22	363	2.68	13.15	416	3.08	15.07	168	1.24	6.09	100	0.74	3.62

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES—Continued.

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	263	0.71	2.93	370	1.00	4.12	93	0.25	1.04	116	0.31	1.29	62	0.17	0.69	42	0.11	0.47	71	0.19	0.79	249
Southeast	38	0.39	1.52	58	0.59	2.22	65	0.66	2.50	38	0.39	1.52	13	0.13	0.50	21	0.21	0.82	34	0.35	1.32	22
Northwest	68	0.50	2.47	93	0.69	3.37	47	0.35	1.70	52	0.38	1.88	9	0.07	0.33	22	0.16	0.80	32	0.24	1.16	33

Distribution of diseases.—The Northeast section shows the same average mortality as in January, which is to be expected, as this section represents over 60 per cent. of the population included in the weekly reports, and therefore indicates most nearly the average death-rate of the country. The rate for February in this section is 24.34 per 1,000, being intermediate between the other two.

In the Southeast section the highest rate of mortality is observed, a general increase in the death-rates of the zymotic diseases having occurred. Whooping-cough, especially, has more than doubled its rate, though still giving but 0.21 deaths per 1,000. Measles have increased 62 per cent., and scarlet fever and enteric fever 25 per cent., with malarial fevers 20 per cent. higher than last month. These diseases have raised the general mortality for this section to 26.24 per 1,000; the pulmonary diseases show but little change.

In the Northwest, consumption has declined only 3 per cent., but lung diseases have fallen from 3.78 to 3.08, or nearly 20 per cent. Diarrhœal diseases and whooping-cough show a slight increase, but a reduction of the mortality from other zymotics has lowered the death-rate from 21.75 to 20.42 per 1,000. The prevalence of diarrhœal diseases in this section during the winter has attracted attention, though the mortality from them was only 0.32 in January, and 0.35 for this month. In Illinois and other Northwestern States, the epidemic of such diseases has received the name of "winter cholera," and since December it has affected a large proportion of the population, though with few deaths resulting.

The distribution of the deaths reported from small-pox in February shows how widely the disease is spread, though the mortality given in the reports must be only a small part of that actually occurring. Fourteen cities have reported deaths during the month, as follows: New Britain, Conn., 1; New York City, 22; Brooklyn, 4; Hudson County, N. J., 6; Newark, N. J., 1; Camden, N. J., 4; Orange, N. J., 2; Philadelphia, 203; Pittsburgh, Pa., 6; Wilmington, Del., 1; Brownsville, Texas, 21; Chicago, 32; Davenport, Iowa, 1; San Francisco, 1. Total, 308, against 262 for January.

SANITARY LEGISLATION IN WEST VIRGINIA.

The following bill has been passed by the Legislature of West Virginia for establishing a State board of health, and regulating the practice of medicine and surgery:

Be it enacted by the Legislature of West Virginia:

SECTION 1. The governor shall appoint two physicians from each congressional district, who shall be graduates of respectable medical colleges, and of not less than twelve years' continuous practice in their profession, and have distinguished themselves by devotion to the study of medicine and the allied sciences, who shall constitute the State board of health.

The terms of office of the persons so appointed shall be so arranged that the terms of two of them shall expire at the end of every second year. Vacancies in the board shall be filled by reappointment or otherwise by the same appointing power.

SEC. 2. The board so appointed shall take the oath of office prescribed by the constitution for other State officers, and receive from the secretary of state certificates of their appointment.

SEC. 3. The board shall meet within twenty days after receiving notice of their appointment, at such time and place as the first-named member of the board shall designate; and shall organize by the election of a president and secretary from their own number, who shall occupy such positions until their successors are elected; and they may adopt all necessary rules and regulations for the dispatch of business. The board shall also provide for itself a suitable seal. A majority of the board shall constitute a quorum; and they are authorized to send either the secretary or president, or a special committee of the board, to consult and co-operate with the National Board of Health, or other sanitary organizations, whenever they may deem it necessary for the public good.

SEC. 4. The secretary shall be the executive officer of the board, shall superintend and perform the work prescribed in this act, and perform such other duties as the board shall direct; shall respond to all communications of the local boards of health, hereinafter provided for, and give such advice as may be deemed necessary; and in case of the prevalence of endemics, epidemics, infectious and contagious diseases, or other unusual sickness, he shall, on the request of the local boards of health, visit the locality and adopt such regulations for its suppression as may seem best. He shall annually report to the governor, on or before the first day of January, the investigations, discoveries, and recommendations of the board, which shall be printed and distributed as soon as practicable thereafter, in the same manner as other public documents of the State.

SEC. 5. The board shall take cognizance of the interests of the life and health of the inhabitants of the State, and shall make, or cause to be made, sanitary investigations and inquiries respecting the causes of diseases, especially of endemics, epidemics, and the means of prevention, the sources of mortality, and the effects of localities, employments, habits, and circumstances of life on the public health. They shall also investigate the causes of diseases occurring among the stock or domestic animals in the State, the methods of remedying the same, and shall gather information in respect to these matters and kindred subjects for diffusion among the people. They shall also advise with regard to the location, drainage, water supply, heating and ventilation of public buildings, school-houses, the ventilation of coal mines, and the drainage and sewerage of towns and cities.

When they may believe there is a probability that any infectious or contagious disease will invade this State from any other State, it shall be their duty to take such action and adopt and enforce such rules as they may, in the exercise of their discretion, deem efficient in preventing the introduction and spread of such disease or diseases. The better to accomplish such objects, the board are empowered and directed to establish, and strictly maintain, quarantine at such places as they may deem proper, and may adopt rules and regulations to obstruct and prevent the introduction or spread of infectious or contagious diseases to or within the State. They may enforce inspections of persons and articles of baggage, or other goods of whatsoever character, as well as the purification of the same; and companies or individuals operating or controlling railroads, steamboats, coaches, public conveyances, and steamers plying the Ohio River or its tributaries in this State, shall obey the rules and regulations when made and published by the State board of health, and any owner or owners, person or persons, having charge of any railway train, passenger coach, steamboat, or public or private conveyance, who shall refuse to obey such rules and regulations when made and published, shall be held to have committed a misdemeanor, and for each offense shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars, to be confined in the county jail not less than fifteen days nor more than two months, or be either so fined or imprisoned, or both, in the discretion of the jury trying the case, to be recovered in any court of competent criminal or penal jurisdiction.

SEC. 6. It shall be the duty of the State board of health, with the consent of the county court, to appoint three intelligent and discreet persons, one of whom, at least, shall be a legally qualified practicing physician, citizens residing in each county of this State, who shall constitute a *local board of health* for the respective counties in which they reside, and such persons, as members of the local board, shall hold their office for the term of two years from the date of their appointment; and such local boards are empowered, and it shall be their duty, to inaugurate and execute and require the heads of families to execute such sanitary regulations as the local board may consider necessary to prevent the outbreak and spread of cholera, small-pox, scarlet fever, diphtheria, and other endemic, infectious, and contagious diseases, and they are empowered to go upon and inspect any premises which they may believe are in an unclean or infectious condition, and the said local board are authorized to enforce the rules and regulations of the State board of health. And it shall be the duty of physicians practicing in any county in which a local board is organized to report promptly all or any of the above-named character of disease under their special treatment to such local board, and such local board shall make report of the same to the State board of health at least once in every three months—first, of the character of the infectious, contagious, endemic or epidemic disease prevailing in their county; second, the number of persons reported as infected with such disease; third, the action taken by such local board to arrest the progress of such prevalent disease, and the visible effects of such action.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 5, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	10	15.4			10														1	
Bangor, Me	16,857	2	6.2			2														1	
Concord, N. H	13,838	8	30.1			8						2								1	
Burlington, Vt	11,364	3	13.7			3						2									
Boston, Mass	362,535	188	27.0			183	5					75	3			6		1		24	2
Cambridge, Mass	52,740	24	23.5			23	1					4								6	
Edgartown, Mass	1,300																				
New Bedford, Mass	26,875	11	21.3			11						3								1	
Newburyport, Mass	13,537	5	19.2			5						2								1	
Marblehead, Mass	7,467	6	41.9			6						3								1	
Nantucket, Mass	3,726	1	13.8			1															
Plymouth, Mass	7,094	3	22.0			3															
Fall River, Mass	49,006	21	22.2			21						11						3		4	
Lowell, Mass	59,485	20	17.5			20						6								8	
Lawrence, Mass	39,178	14	18.6			14						1								3	
Pittsfield, Mass	13,367																				
Worcester, Mass	58,295	22	19.6			22						10				1				3	
Lynn, Mass	38,284	11	14.9			11						1								6	
Brockton, Mass	13,608																				
Holyoke, Mass	21,851	7	16.7			7						3				1				1	
Bridgewater, Mass	3,620	2	28.8			2						1									
Milford, Mass	9,310																				
Chicopee, Mass	11,323	3	13.8			3						1								1	
Fitchburgh, Mass	12,405	5	21.0			5						1								1	
Somerville, Mass	24,985	6	12.5			6						1								1	
Springfield, Mass	33,340	11	17.1			11						3								2	
Spencer, Mass	7,466	1	7.0			1						1									
Quincy, Mass	10,529	6	30.0			6						2								1	
Northampton, Mass	12,172	3	12.9			3						1								1	
North Adams, Mass	10,192	3	15.4			3						1									
Haverhill, Mass	18,475	4	11.4			4						1						1		1	
Gloucester, Mass	19,329	9	24.4			9						5								1	
Chelsea, Mass	21,785	8	19.0			8						4								1	
Clinton, Mass	8,030	2	13.0			2															
Beverly, Mass	8,445	3	18.0			3														1	
Attleborough, Mass	11,109	5	23.1			5						2								1	
Malden, Mass	12,017	3	13.0			3						1								2	
Salem, Mass	27,500	14	26.3			14						2				1				1	
Taunton, Mass	21,200	5	12.0			5						1								1	
Westboro', Mass	5,217	2	20.0			2														1	
Woburn, Mass	10,982	3	14.2			3														2	
Weymouth, Mass	10,571	2	9.6			2														1	
Waltham, Mass	11,711	4	17.6									2								1	
Webster, Mass	5,696	2	18.0			2						1									
Westfield, Mass	7,700																				
Brookline, Mass	8,200	4	27.3			4						1									
Newton, Mass	17,000	4	21.1			4						1									
Providence, R. I	104,850	35	17.4			34	1					5	1			1				3	
New Haven, Conn	62,882	29	24.0			24	5					5	2					1		7	
New Britain, Conn	13,978	7	26.1			7						2								1	
Waterbury, Conn	20,269	5	12.8			5														1	
Fairfield, Conn	3,476	1	15.0			1															
Norwich, Conn	21,150	8	19.6			8						1								1	
New York, N. Y	1,206,577	717	30.9			691	26					286				24		8		116	
Brooklyn, N. Y	566,689	244	22.4			243	1					100				6		1		32	
Yonkers, N. Y	18,892	6	16.5			6						2								1	
Poughkeepsie, N. Y	20,207	9	23.2			9						2								1	
Newburgh, N. Y	18,050	8	23.1			8						3									
Rochester, N. Y	89,363																				
Buffalo, N. Y	155,137	54	18.1			53	1					20				1				5	
Watertown, N. Y	10,697	3	14.6			3						1									
Binghamton, N. Y	17,315	3	9.0			3														2	
Cambridge, N. Y	1,850	2	58.2			2						1						1			
Seneca Falls, N. Y	6,000																				
Lansingburgh, N. Y	7,150																				
Tarrytown, N. Y	3,270																				
Utica, N. Y	33,913	2	3.0			2															
Little Falls, N. Y	6,940																				
Hudson County, N. J	187,950	98	27.1			98						32				5		2		9	
Newark, N. J	136,400	64	24.4			64						27						1		12	
Orange, N. J	13,206	8	31.6			8						3								1	
Camden, N. J	41,658	9	11.2			9						2								2	
Plainfield, N. J	8,126	1	6.5			1						1									
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	381	23.4			353	28					135				3		2		32	1
Pittsburgh, Pa	156,381	87	29.0			84	3					39	1			2	1			8	
Erie, Pa	27,330	13	24.4			13						4						1		3	
Reading, Pa	43,280	14	16.8			14						2								4	
Wilmington, Del	42,499	18	23.0			14	4					3	2							6	
District of Columbia	180,000	79	22.9			40	39					12	22			1	1			8	6
Norfolk, Va	21,966	12	28.5			4	8					2	2			1					3
Richmond, Va	63,803	32	26.1			13	19					3	8							5	3
Lynchburg, Va	15,959	11	35.9			1	10						5								2
Wilmington, N. C	17,361																				
Charleston, S. C	50,000	30	31.3			10	20					4	6					1		1	8
Augusta, Ga	23,023	11	24.8			8	3					2	1								
Atlanta, Ga	37,421	12	16.5			8	4					2						1			1
Savannah, Ga	30,681	19	32.3			5	14					2	2					2		1	1
Rome, Ga	5,000	1	10.4			1										1					
Brunswick, Ga	2,900	1	18.0				1													1	
Jacksonville, Fla	8,000	7	45.6			6	1													3	
Key West, Fla	12,000																				
Mobile, Ala	31,205	11	18.3			5	6						3							4	
Selma, Ala	7,505	4	27.8			1	3						1								1
Montgomery, Ala	16,714																				
Jackson, Miss	7,000																				

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 5, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Vicksburg, Miss	11,814	6	26.5			2	4										1				1
Columbus, Miss	5,203	1	10.0				1														1
New Orleans, La	216,140	93	22.4			55	39					11	10			1		1		5	10
Shreveport, La	11,017	5	23.6			3	2						1			1					
Baton Rouge, La	7,187	3	21.7			1	2														
Morgan City, La	2,018																				
Austin, Tex	10,960																				
San Antonio, Tex	20,561	10	25.7			8	2					1	1							1	
Galveston, Tex	22,253																				
Brownsville, Tex	5,800	8	71.9									3									
Waco, Tex	8,000																				
Marshall, Tex	5,450																				
Little Rock, Ark	13,185	7	27.7			3	4					1					1				
Nashville, Tenn	43,461	18	21.6			12	6					3	2								
Memphis, Tenn	33,593	22	34.1			11	11					2	4			1	1		1	5	3
Clarksville, Tenn	7,200																				
Murfreesboro', Tenn	3,800	1	13.8				1														
Shelbyville, Tenn	1,919																				
Louisville, Ky	123,625	58	24.4			37	21					10	8			1		2		9	7
Bowling Green, Ky	6,000	4	34.7			1	3														
Cincinnati, Ohio	255,708	99	20.2			95	4					37				1				17	
Cleveland, Ohio	160,140	48	15.6													2				10	
Dayton, Ohio	38,677	15	20.1			14	1					5								5	1
Gallipolis, Ohio	4,500	3	34.8			3						3									
Portsmouth, Ohio	11,314	1	4.6			1						1									
Indianapolis, Ind	75,074	35	24.3			27	8					14						3	1	2	2
Evansville, Ind	29,280	12	21.3			12						3						2		4	
Jeffersonville, Ind	10,422																				
Richmond, Ind	12,743	3	12.3			3						1									
Chicago, Ill	503,304	189	19.6			189						89				11		2		19	
Peoria, Ill	29,315	8	14.2			8						5									
Aurora, Ill	11,825	3	13.2			3						2				1					
Jacksonville, Ill	10,927	1	4.8			1						1									
Elgin, Ill	8,770																				
Moline, Ill	8,000																				
Rock Island, Ill	11,660	2	8.7			2						2						1			
Anna, Ill																					
Milwaukee, Wis	115,578	35	15.7			35						18						1		1	
Beloit, Wis	5,180																				
Saint Paul, Minn	41,498																				
East Saginaw, Mich	19,016	8	21.9			8						3								3	
Flint, Mich	9,000	6	34.8			5	1					3								1	
Lansing, Mich	8,850																				
Dubuque, Iowa	22,254																				
Keokuk, Iowa	12,117	3	12.9			2	1					1									1
Burlington, Iowa	19,450																				
Davenport, Iowa	23,000																				
Saint Louis, Mo	350,522	138	20.5			123	15					43	7			4		2	2	14	2
Kansas City, Mo	60,000	11	9.5			9	2					7	1					1		2	
Lawrence, Kans	8,500																				
Omaha, Nebr	30,518	16	27.3			16						4				1				6	
Boulder, Colo	3,030																				
Salt Lake City, Utah	20,768	8	20.0			8						4								2	
San Francisco, Cal	233,956																				
Sacramento, Cal	21,420	3	7.3			3															
Los Angeles, Cal	11,311																				
Vallejo, Cal	7,000	1	7.3																		
Total	7,901,538	3,409	22.5									1,136	93			78	9	38	6	476	56

ABSTRACTS FROM CONSULAR REPORTS.

BARCELONA, SPAIN.—United States Consul F. H. Scheuch sends a report of mortality for the year 1880 in this city of 260,000 inhabitants. There were 7,597 deaths from all causes, giving an annual death-rate of of 29.2 per 1,000. The greatest monthly mortality was 1,113, in January; the least, 505, in June. Of the decedents, 2,290 were under one year of age; 925 from 1 to 5 years. Total under 5 years, 3,215, or 42.2 per cent. of the total deaths. There were 1,226 deaths from 40 to 60 years, and 1,361 over 60 years of age. Among the causes of death are noted: Consumption, 871: other lung diseases, 962; diarrhœal diseases, 708; typhus and typhoid fevers, 384; scarlet fever, 292; diphtheria and croup, 152; small pox, 136.

BRADFORD, ENGLAND.—United States Consul C. O. Shepard forwards a report for the week ending February 12. The births registered were 124, against 81 deaths; annual death-rate 20.8 per 1,000. Of the decedents, 31 were under 5 years of age, and 16 of these were under 1 year.

CALCUTTA.—The official report of the health officer, Surgeon-Major K. McLeod, for the last quarter of 1880, shows a registration of 2,324 births against 4,008 deaths. This mortality is considerably above the average for that season, though no epidemic disease prevailed. Among the causes of death were: Fevers 1,333, cholera 344, diarrhœa and dysentery 457, small-pox 6. Vaccination is well provided for, and out of a total of 1,207 during the quarter, 1,126 were successful, 45 failed, and in 29 the result was not known. It is proposed to establish a special vaccine station for sailors at a convenient point.

DUBLIN, IRELAND.—The report for the year 1880 is forwarded by the United States consul, giving in detail the statistics of mortality in the registration district of Dublin. The following figures are noted: Total number of deaths, 11,308; deaths under 5 years, 4,454, or 39.4 per cent. of all deaths; between 60 and 80 years of age there were 1,859 deaths, and 377 over 80 years. From zymotic diseases, there were 2,309 deaths, as follows: Small-pox 266, measles 271, scarlet fever 544, diphtheria 36, whooping-cough, 376, typhus and typhoid fevers 392, and diarrhœa 424.

FOOCHOW, CHINA.—United States Consul J. C. A. Wingate, in his weekly reports from December 25 to January 15, notes no change in the general sanitary condition, which is very good in the foreign settlement, but not so in the native city. No epidemic disease had prevailed.

HAYTI.—Weekly reports are received from Jacmel for the five weeks ending January 2. During this time there were 21 deaths, but no estimate of population is given, nor are any records kept of diseases. No contagious disease is reported.

MALTA AND GOZO.—United States Consul C. B. Eynaud reports for the two weeks ending February 15, a total of 149 deaths in a population of 154,850; annual death-rate 25.1 per 1,000. Improvements

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 5, 1881—Continued.

Cities and States.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Vicksburg, Miss.	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Columbus, Miss.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
New Orleans, La.	1	....	3	1	1	....	1	....	....	1	1	1	7	2	8	3	....	....	....	1	....	....	....	....	....	....	....	....	....	....
Shreveport, La.	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Baton Rouge, La.	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Morgan City, La.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Austin, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
San Antonio, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Galveston, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Brownsville, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	4	....	....	....
Waco, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marshall, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Little Rock, Ark.	....	..	....	1	....	....	....	....	....	....	....	....	....	....	2	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Nashville, Tenn.	1	....	..	..	1	....	....	....	....	....	....	....	....	....	1	2	....	....	....	....	....	....	3	1	....	....	....	....	....	....
Memphis, Tenn.	1	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Clarksville, Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Murfreesboro', Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....
Shelbyville, Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Louisville, Ky.	....	....	....	....	1	....	....	....	1	....	1	....	....	....	2	2	1	....	1	....	....	....	....	....	2	....	....	....	....	....
Bowling Green, Ky.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Cincinnati, Ohio.	1	....	1	....	1	....	1	....	....	....	1	....	6	....	11	....	1	....	4	....	....	....	1	....	2	....	....	....	....	....
Cleveland, Ohio.	2	....	1	....	1	....	2	....	....	....	....	....	3	....	1	....	2	....	1	....	1	....	....	....	1	....	....	....	....	....
Dayton, Ohio.	....	..	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Gallipolis, Ohio.	1	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Portsmouth, Ohio.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
Indianapolis, Ind.	2	....	1	....	3	1	1	....	1	....	....	....	1	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Evansville, Ind.	....	....	....	....	....	....	1	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
Jeffersonville, Ind.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Richmond, Ind.	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Chicago, Ill.	11	....	10	....	9	....	1	..	1	....	1	....	1	....	15	....	1	....	5	....	....	....	....	....	6	....	3	....	1	....
Peoria, Ill.	....	....	....	....	1	....	....	....	....	....	1	....	3	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Aurora, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jacksonville, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....
Elgin, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Moline, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rock Island, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Anna, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Milwaukee, Wis.	....	....	....	....	2	....	....	....	....	....	....	....	3	....	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
Beloit, Wis.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Saint Paul, Minn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
East Saginaw, Mich.	....	....	....	....	1	....	....	....	1	1	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Flint, Mich	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lansing, Mich.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dubuque, Iowa.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Keokuk, Iowa.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Burlington, Iowa.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Davenport, Iowa.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Saint Louis, Mo.	....	....	....	....	2	2	....	....	1	....	1	..	1	....	19	1	3	....	1	....	1	..	2	1	4	....	....	....	1	1
Kansas City, Mo.	....	....	....	....	....	....	....	....	1	....	1	1	....	1	2	..	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Lawrence, Kans.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	....	1	....	....	....	....	....	3	....	....	....	....	....
Omaha, Nebr.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boulder, Colo.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Salt Lake City, Utah.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
San Francisco, Cal.	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sacramento, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Los Angeles, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Vallejo, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	91	2	42	6	129	4	20	1	38	3	24	5	105	4	303	28	32	3	105	9	6	3	20	2	52	1	55	5	22	4

are being made in the drainage of Vallette. The only death from zymotic disease reported, is one from typhoid fever. Mean temperature for the two weeks, 57°.

PARIS, FRANCE.—The weekly bulletin for the week ending February 4, shows no change in the general mortality of Paris, but Dr. Bertillon notes a considerable increase of diphtheria, which balances a decline in typhoid fever. The infant mortality has also been increased by a greater prevalence of measles. Small-pox caused 33 deaths, against 41 for the preceding week.

The following reports for the week ending March 5, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 25; under 5 years, 7; accidents 1, consumption 3, croup 2, scarlet fever 1, pneumonia 2, bronchitis 1. Bath, Me., 8,000; no deaths. Belfast, Me., 5,308; deaths, 4; consumption 3. Brattleborough, Vt., 6,000; one death. Bucyrus, Ohio, 3,950; old age 1. Calais, Me., 6,162; congestion of lungs 1, under 5 years. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 6,000; deaths, 2; consumption 1, diarrhœa 1. Clinton, Mich., 1,200; no deaths. Crystal Springs, Miss., 955; one death, under 5 years. Decatur, Miss., 1,000; no deaths. Gunn City, Mo., 125; pneumonia 1. Hernando, Miss., 1,000; deaths, 2; erysipelas 1, congestion of lungs 1. Huntingdon, Pa., 4,500; puerperal 1. Indianola, Tex., 900; one death. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,250; deaths 2; under 5 years 1, pneumonia 1. Kenosha, Wis., 5,500; deaths, 4; under 5 years 3; consumption 1, diarrhœa 1, diphtheria 2. Lake, Ill., 18,200; deaths, 2. La Salle, Ill., 8,885; no deaths. Louisiana, Mo., 5,200; deaths, 2; congestion of lungs 1, puerperal 1. Macon, Ga., 13,800; deaths, 2; consumption 1. Madison, Ind., 9,009; old age 1. Marquette, Mich., 4,000; no deaths. Martinsburg, W. Va., 6,384; croup 1, under 5 years. Milan, Tenn., 1,200; congestion of lungs 1, under 5 years. Milledgeville, Ga., 3,000; no deaths. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,400; deaths, 3; consumption 1, scarlet fever 1. Niles, Mich., 4,200; no deaths. Painesville, Ohio, 5,500: pneumonia 1. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; no deaths. Phœnixville, Pa., 6,692; deaths, 4; under 5 years, 2; consumption 2, croup 1, diarrhœa 1. Pleasant Hill, Miss., 243; no deaths. Plymouth, Mich., 3,000; deaths, 2; diphtheria 1. Port Gibson, Miss., 1,200; one death. Port Royal, S. C., 750; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; no deaths. Senatobia, Miss., 1,000; no deaths. Springfield, Ohio, 21,000; deaths, 8; under 5 years, 5; cerebro-spinal meningitis 1, consumption 2, croup 1, diphtheria 1, whooping-cough 1. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; consumption 1. Titusville, Pa., 9,000; one death. Tuscaloosa, Ala., 2,000; no deaths. Watertown, Wis., 10,000; deaths, 3; under 5 years, 2; diarrhœa 1, diphtheria 1, congestion of lungs 1. Winchester, Va., 5,000; deaths, 3; scarlet fever 1, bronchitis 1, old age 1. Youngstown, Ohio, 15,421; deaths, 5; under 5 years, 1; consumption 1, congestion of lungs 1. Total population, 298,404; deaths under 5 years, 25; total number of deaths, 87; annual death-rate per 1,000, 15.2.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	5,000	Feb. 26	3	31.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
West Indies	Bermuda	14,867	Feb. 22	4	13.8	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	1	.....	64
Do	...do	14,867	Mar. 1	3	10.4	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	63
Cuba	Havana	195,437	Feb. 26	146	38.0	.....	.....	.....	2	.....	14	.....	3	.....	.....	.....	.....	74
Hayti	Port au Prince	30,000	Feb. 16	12	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
Do	...do	30,000	Feb. 23	16	27.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	Aux Cayes	10,000	Feb. 12	6	31.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
Do	...do	10,000	Feb. 19	8	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
Guadaloupe	Pointe à Pitre	22,919	Feb. 12	16	36.4	.....	.....	25	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	Matamoras	16,000	Mar. 5	21	68.4	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....
Central America	Aspinwall	2,500	Feb. 26	3	62.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Teneriffe	Santa Cruz	16,610	Feb. 19	15	47.1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	66
Ireland	Queenstown	10,000	Feb. 26	5	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Feb. 19	112	26.4	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....	1	.....
Do	...do	230,000	Feb. 26	109	24.7	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....
Scotland	Dundee	155,100	Feb. 19	62	20.8	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	9	.....	35
Do	Leith	59,958	Feb. 26	25	21.2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	3	36
England	London	3,707,130	Feb. 19	1,564	22.0	.....	.....	.....	.....	.....	55	.....	20	.....	.....	.....	95	38
Do	Liverpool	549,834	Feb. 26	301	28.5	.....	.....	.....	.....	.....	.....	1	1	6	5	18	16	35
Do	Bristol and Clifton	213,500	Feb. 19	112	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	40
Do	Sheffield	304,938	Feb. 19	129	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
Do	Bradford	.....	Feb. 19	73	18.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Do	Tunstall	27,775	Feb. 26	21	39.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
Do	Cardiff	83,389	Feb. 19	31	19.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	40
Do	...do	83,389	Feb. 26	23	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
France	Rouen	104,209	Feb. 26	64	32.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	Feb. 19	172	28.2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	4	36
Do	Rotterdam	148,102	Feb. 26	97	34.1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	16	1	.....
Switzerland	Zurich	.....	Feb. 19	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Germany	Berlin	1,123,571	Feb. 12	486	22.5	.....	.....	.....	.....	.....	.....	11	3	3	.....	127	58	.....
Do	Bremen	112,200	Feb. 12	42	19.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Do	Frankfort	137,000	Feb. 19	61	27.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	36
Do	Brunswick	74,000	Feb. 19	43	30.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	37
Do	Barmen	95,000	Feb. 19	49	26.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	35
Do	Breslau	273,000	Feb. 12	142	27.0	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	11	37
Do	Cologne	144,537	Feb. 19	95	34.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....
Belgium	Antwerp	173,643	Feb. 12	101	30.3	.....	.....	.....	.....	14	2	21	4	.....	.....	1	1	.....
Do	...do	173,643	Feb. 19	102	30.6	.....	.....	.....	.....	16	2	17	4	.....	.....	.....	.....	.....
Bavaria	Munich	230,000	Feb. 19	166	37.5	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	13	.....
Austria	Vienna	731,191	Feb. 19	440	31.4	.....	.....	.....	.....	.....	32	.....	.....	.....	.....	.....	22	37
Roumania	Bucharest	177,646	Feb. 5	107	31.4	.....	.....	.....	.....	.....	2	.....	5	.....	.....	.....	9	.....
Do	...do	177,646	Feb. 12	92	27.0	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	3	.....
Do	...do	177,646	Feb. 19	108	31.7	.....	.....	.....	.....	.....	1	.....	8	.....	.....	.....	11	.....
Russian Poland	Warsaw	357,169	Feb. 12	191	27.9	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	32
Sweden	Stockholm	169,429	Feb. 12	109	33.5	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	11	15
Norway	Christiania	120,000	Feb. 12	40	17.3	.....	.....	.....	.....	1	.....	5	.....	.....	.....	10	7	16
Spain	Cadiz	65,028	Feb. 12	40	32.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
Do	Malaga	115,882	Feb. 12	77	34.8	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	61
Do	...do	115,882	Feb. 19	66	29.7	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	62
Egypt	Alexandria	220,000	Feb. 19	146	34.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Colony	Cape Town	35,000	Feb. 7	29	43.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
East Indies	Calcutta	429,535	Jan. 29	305	37.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69

NASSAU, BAHAMAS.—United States Consul T. J. McLain, jr, reports, under date of February 19, that the town continues healthy. About 140 tourists and invalids are there, most of whom are Americans.

NINGPO, CHINA.—United States Consul E. C. Lord reports for the three weeks ending January 29, no unusual sickness or mortality. Zymotic diseases prevail, especially of the diarrhœal class, with some malarial fevers.

SAMOAN ISLANDS.—United States Consul Thomas M. Dawson sends reports for the two months ending December 10. He observes that the natives are unclean in habits and surroundings, but do not seem to show an excessive mortality. The population of Apia is estimated at 40,000; there is no attempt at drainage or other sanitary measures. Leprosy prevails among the natives, and two foreigners died of that disease in 1880.

SANDWICH ISLANDS.—United States Consul F. P. Hastings, under date of February 12, sends report of the board of health, stating that varioloid first appeared in Honolulu February 5. Since that date 44 cases have occurred, with 4 deaths. Nine cases are quarantined in their houses, and 31 have been sent to the quarantine station on the reef; their dwellings have been disinfected and quarantined. The passengers by the lately arrived Chinese ship, *Mee Foo*, have been quarantined and six are in the small-pox hospital at the reef station.

SHANGHAI, CHINA.—For the four weeks ending February 5, United States Consul O. N. Denny reports great prevalence of catarrhal, pulmonary, diarrhœal, and malarial diseases. The latter were ascribed to the late dry season, leaving the muddy channels of the creeks exposed.

ST. THOMAS, W. I.—United States Consul Victor Thompson sends weekly reports from January 11 to February 19. No deaths from yellow fever had occurred during that time, but a kind of "acclimating" fever prevailed, which resembled yellow fever, and was treated in the same manner as that disease.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

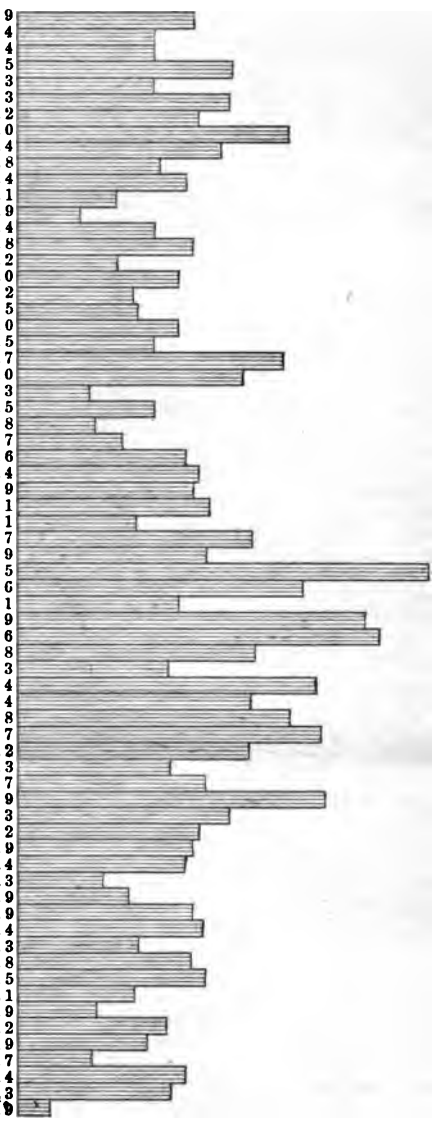
BURLINGTON, VT.—Dr. Geo. M. Ockford, under date of March 10, remarks that there has been but one death from scarlet fever in the past two months. During the extremely cold weather some sudden deaths occurred among aged people, and a tendency to paralytic affections was observed. Diseases of the respiratory organs have been less frequent than in former winters, probably owing to the continued cold, and absence of sudden changes of temperature, and of humidity in the air.

TARRYTOWN, N. Y.—Dr. N. H. Freeland forwards the following synopsis of the report of the board of health for the year 1880. The board was organized and entered upon its duties March 1, 1880. Since that date the following ordinances have been passed: May 26, an ordinance requesting returns of births and deaths. January 22, 1881, an ordinance requiring all cases of contagious and infectious diseases to be reported to the health officer. February 8, an ordinance making vaccination compulsory. During the year ending March 1, the village has been free from epidemics. In a locality known as Penny Bridge, 18 cases of dysentery arose from local causes, of which 7 were fatal. Seven cases of scarlet fever occurred in the deaf and dumb asylum, but all recovered. The report of mortality shows 35 deaths during the 9 months ending March 1, giving an annual death-rate of 14 per 1,000. Among the fatal diseases were, consumption 3, diarrhœal diseases 9, croup 1, bronchitis 1, accident 1. Two still-births should be deducted from the above estimate, and including these, the total number of births was 49.

TUXPAN, MEXICO.—Dr. A. M. Boyd reports for the month of January, 23 deaths, of which 4 were from consumption, 3 from pneumonia, 5 from malarial fevers, and 1 from dysentery; annual death-rate, 38.4 per 1,000. In February there were only 19 deaths: Consumption caused 2, pneumonia 3, malarial fevers 6, and epilepsy 2; annual death-rate, 31.7 per 1,000 Cold weather prevailed during the two months, causing much injury to fruit and sickness among the people

DIAGRAM SHOWING THE ANNUAL DEATH-RATE PER 1,000 *IN CITIES OF THE UNITED STATES FOR THE YEAR* 1880.

States and cities.		Population.	Total number of deaths.	Annual death-rate per 1,000.
Me	Portland	33,810	707	20.9
N. H	Concord	13,838	254	18.4
Vt	Burlington	11,364	209	18.4
Mass	Boston	362,535	8,634	23.5
	Cambridge	52,740	964	18.3
	New Bedford	26,875	626	23.3
	Newburyport	13,537	288	21.2
	Marblehead	7,467	202	27.0
	Lowell	59,485	1,329	22.4
	Lawrence	39,178	739	18.8
	Lynn	38,284	780	20.4
	Brockton	13,608	219	16.1
	Chicopee	11,325	182	13.9
	Fitchburg	12,405	228	18.4
	Worcester	58,295	1,214	20.8
	Milford	9,310	151	16.2
	Plymouth	7,094	142	20.0
	Somerville	24,985	429	17.2
	Springfield	33,340	583	17.5
R. I	Providence	104,850	2,098	20.0
Conn	New Haven	62,882	1,165	18.5
N. Y	New York	1,206,577	32,245	26.7
	Brooklyn	566,689	13,576	24.0
	Yonkers	18,892	271	14.3
	Poughkeepsie	20,207	373	18.5
	Utica	33,913	502	14.8
	Newburgh	18,050	301	16.7
N. J	Hudson County	187,950	4,372	20.6
	Newark	136,400	2,925	21.4
Pa	Philadelphia	846,980	17,701	20.9
	Pittsburgh	156,381	3,457	22.1
	Erie	27,730	474	17.1
Md	Baltimore	332,190	8,216	24.7
District of Columbia		180,000	4,122	22.9
Va	Norfolk	21,966	781	35.5
	Richmond	63,803	1,759	27.6
N. C	Wilmington	17,361	349	20.1
S. C	Charleston	50,000	1,595	31.9
Ga	Savannah	30,681	1,002	32.6
	Augusta	23,023	571	24.8
	Atlanta	37,541	724	19.3
Fla	Jacksonville	8,000	227	28.4
Ala	Mobile	31,205	762	24.4
	Selma	7,505	201	26.8
Miss	Vicksburg	11,814	339	28.7
La	New Orleans	216,140	5,631	24.2
	Shreveport	11,017	213	19.3
Tex	San Antonio	20,561	446	21.7
Ark	Little Rock	13,185	381	28.9
Tenn	Nashville	43,461	1,014	23.3
Ky	Louisville	123,625	2,618	21.2
Ohio	Cincinnati	255,708	5,331	20.9
	Cleveland	160,140	3,260	20.4
	Dayton	38,677	593	15.3
	Gallipolis	4,500	76	16.9
Ind	Indianapolis	75,074	1,571	20.9
	Evansville	29,280	633	21.4
	Richmond	12,743	220	17.3
Ill	Chicago	503,304	10,469	20.8
Wis	Milwaukee	115,578	2,491	21.5
Minn	Saint Paul	41,498	711	17.1
Iowa	Keokuk	12,117	180	14.9
Mo	Saint Louis	350,522	6,725	19.2
Kans	Lawrence	8,500	152	17.9
Nebr	Omaha	30,518	449	14.7
Utah	Salt Lake City	20,768	424	20.4
Cal	San Francisco	233,956	4,518	19.3
	Vallejo	7,000	83	11.9



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BAGDAD.—A communication dated March 11, states that a telegram has been received at the State Department, Washington, from the United States consul-general at Constantinople, reporting an outbreak of plague near Bagdad. The consul will send details to the National Board of Health by mail.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

National Board of Health

BULLETIN.

VOL. 2.] . WASHINGTON, D. C., SATURDAY, MARCH 26, 1881. [No. 39.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is darticularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease, which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

PROPOSED SANITARY LEGISLATION IN PENNSYLVANIA.

The following bill is now before the legislature of Pennsylvania, to establish a State board of health, and to regulate the practice of medicine:

[AN ACT to regulate the practice of medicine, to establish a State board of health, and to make an appropriation therefor.]

SECTION 1. *Be it enacted by the Senate and House of Representatives of the commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That the governor, by and with the advice and consent of the senate, shall appoint six persons, who, with the secretary, shall constitute the State board of health. The persons so appointed shall hold office for six years, provided that the terms of office of the six first appointed shall be so arranged that the terms of two members shall expire in two years, the terms of two shall expire in four years, and the terms of two shall expire in six years. And the vacancies so created, as well as all other vacancies occurring otherwise, shall be filled by the governor, by and with the advice and consent of the senate; and provided, also, that appointments made when the senate is not in session may be confirmed at its next ensuing session.

SEC. 2. The State board of health shall have the general supervision of the interests of health and life of the citizens of the commonwealth. It shall have authority to make such sanitary investigations as it may, from time to time, deem necessary in improving the public health. It shall pass upon the competency of practitioners of medicine. It shall have the general supervision of the collection of the vital statistics of the commonwealth. It shall, at the session of the general assembly next following its creation, report for legislative action a code of sanitary laws. It shall prepare an annual report of its operations, which shall be submitted to the governor. It shall diffuse a knowledge of the means of obtaining individual and public health and of preventing disease.

SEC. 3. The first meeting of the board shall be held within fifteen days after its appointment, and thereafter in January and June of each year, and at such other times as the board shall deem expedient. The meeting in January in each year shall be in Harrisburg. A majority shall constitute a quorum. The board shall elect a secretary, who, by virtue of such election, shall be a member of the board and its executive officer. The members shall choose one of their number to be president, and they may adopt rules and by-laws for their government, subject to the provisions of this act.

SEC. 4. No member of the board, the secretary excepted, shall receive compensation, but all proper and necessary expenses of members, while engaged in the service of the board, shall be paid by the State upon the presentation of an itemized account, with vouchers annexed. The secretary shall receive an annual salary of three thousand dollars, which shall be paid in the same manner as salaries of other State officers are paid. Said board may, from time to time, engage suitable persons to render sanitary service, and to make or supervise practical or scientific investigations, and examinations requiring expert skill, and to prepare plans and reports relative thereto, but such special sanitary service shall not cost more than three thousand dollars in any one year. The total expenditures of the board shall not exceed the sum of eight thousand dollars in any one year.

SEC. 5. The sum of sixteen thousand dollars is hereby appropriated from the State treasury for the purposes of this act. The expenditures properly incurred by the authority of said board, and verified by affidavit, shall be paid by the treasurer upon the warrant of the auditor-general.

SEC. 6. The standard qualifications of a practitioner of medicine, surgery, or obstetrics in this commonwealth shall be and consist of the following, namely:

A good moral character.

A thorough elementary education.

Three years' study of medicine in its various branches under a competent preceptor.

Attendance upon two full courses of lectures in a legally-chartered medical school.

A satisfactory examination, before or on graduation, in human anatomy, human physiology, pathology, chemistry, materia medica, obstetrics, practice of medicine, surgery, and public hygiene.

A diploma received in regular manner from a chartered medical school duly authorized by law to confer upon its alumni the degree of doctor of medicine, and

A license granted as hereinafter set forth.

Every applicant for such license shall furnish to the State board of health satisfactory proof that he is possessed of the qualifications enumerated in this section. He shall deposit a copy of his diploma in the office of the court of common pleas of the county in which he may sojourn or reside, said copy to be a matter of record and open to public inspection: *Provided*, That any resident practitioner of medicine, surgery, or obstetrics, who had been in continuous practice in this commonwealth for a period of not less than five years prior to the passage of the act of assembly entitled "An act to protect the people of the commonwealth against incompetent practitioners of medicine, surgery, or obstetrics," approved the twenty-fourth day of March, A. D. 1877, shall file in the office of the court of common pleas of the county where such person intends practicing, his affidavit setting forth the time of continuous practice, and the place or places where such practice was pursued in this commonwealth. Said affidavit shall, if found by the State board of health to be correct and true, be deemed sufficient evidence of qualification to practice medicine, surgery, or obstetrics, and said board shall issue the license hereinafter provided for.

SEC. 7. The State board of health shall examine every diploma or affidavit of competency recorded and filed in the offices of the said courts of the various counties; and said board shall be the judge of the genuineness of said diploma, and of the truth of said affidavit of competency. If said diploma or affidavit of competency be found genuine and true, and if the person therein named be the person applying for a license to practice medicine, the State board of health shall issue such license, which shall be conclusive evidence of the right of the lawful holder of the same to practice medicine in this commonwealth. In addition to the persons already mentioned as entitled to such license, any person who shall submit himself to such examination as the said board may require, and who shall pass an examination satisfactory to the examiners, under such restrictions and regulations as the board may prescribe, shall receive a license

from said board of health to practice medicine, surgery, or obstetrics, and shall be entitled to all the rights and privileges herein mentioned. The officers of said board shall have authority to administer oaths and to take testimony in all matters relating to their duties. Said board shall furnish to the prothonotaries of the several counties a list of all persons receiving its license. Said board shall have power to refuse or revoke its licenses for just and proper cause.

SEC. 8. It shall be unlawful, on and after the first day of January, A. D. 1882, for any person not qualified and licensed by the State board of health, according to the sixth and seventh sections of this act, to practice medicine, surgery, or obstetrics, or to collect any fees for medical, surgical, or obstetrical services.

SEC. 9. Candidates for examination by the State board of health shall pay a fee of five dollars, which shall be returned to them if licenses be refused. Examinations may be made, in whole or in part, in writing, and shall be of an elementary and practical character, but sufficiently strict to test the qualifications of the candidate as a practitioner.

SEC. 10. Any person shall be regarded as practicing medicine within the meaning of this act who shall profess publicly to be a physician, or to prescribe for the sick, or who shall append to his name the letters "M. D.;" but nothing in this act shall be construed to prohibit gratuitous services in cases of sudden emergency. And this act shall not apply to commissioned surgeons of the United States Army and Navy.

SEC. 11. Any itinerant who shall sell any drug, nostrum, ointment, or agency of any kind intended for the treatment of disease or ailment, or who shall, by writing or printing, or by any other method, publicly profess to cure or treat disease, injury, or bodily ailment whatsoever, shall pay a license of one hundred dollars a month, to be collected in the way now prescribed by law for pedlars.

SEC. 12. It shall be the duty of practitioners of midwifery in this commonwealth to register their names and post-office address in the office of the court of common pleas of the county where they reside, and said practitioners of midwifery shall be required, under penalty of ten dollars, to be recovered in any court of competent jurisdiction in the commonwealth, to report to the prothonotary of said county within thirty days of their occurrence, all births and deaths which may come under their supervision, with a certificate of the cause of death and such correlative facts as the board may require.

SEC. 13. It shall be the duty of all health officers and boards of health in the State, all officers of the State, the physicians of all incorporated companies, or the president or agent of any company or institution, chartered, organized, or transacting business under the laws of this commonwealth, so far as is practicable, to forward to the State board of health any information bearing upon public health which may be requested by said board.

SEC. 14. Any person who shall offer for record a copy of any diploma to practice medicine which shall have been issued to any other person, or shall offer for record a diploma or affidavit of competency issued or obtained fraudulently, or in violation of the laws of this commonwealth, or in violation of the charter of the institution conferring said diploma, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than three hundred dollars nor more than five hundred dollars, or imprisonment at hard labor for not less than one nor more than three years, or both, at the discretion of the court, and his license shall thereby be revoked. And any person who shall in any other respect violate or fail to comply with the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction, before any court of competent jurisdiction, shall be sentenced to pay a fine of not less than two hundred dollars nor more than four hundred dollars for each and every offense, for the use of the county wherein such misdemeanor is committed, and his license shall thereby be revoked.

SEC. 15. All acts or parts of acts inconsistent herewith be, and the same are hereby, repealed.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

HARTFORD, CONN.—Dr. C. W. Chamberlain, secretary of the State board of health, forwards a copy of his report for the month of January, and a pamphlet issued by the board of health, giving instructions relating to the restriction and prevention of small-pox. The remarks on vaccination are quoted from Hart; the directions as to disinfection are practical, and carbolic acid and chloride of lime are abandoned for sulphur and solutions of zinc and iron. The treatise closes with brief but plain directions for the construction of a pest-house, and the proper disinfecting arrangements connected therewith. The monthly report shows but one death in January from small-pox (in Hartford), 3 from scarlet fever, 3 from typhoid fever, and 4 from measles. Notice is taken of 3 deaths in Hartford and 2 in Meriden from malarial fevers, as indicating an unusual prevalence of such diseases for the season. Two cases of severe poisoning from aniline dyes were investigated; one was from wearing blue wristlets, the other from red-lined mittens. The eruptions were characteristic and severe, but involved only the hands and a portion of the arms.

NEW YORK—Dr. John T. Nagle, health officer, forwards the following report of mortality in that city for the last quarter of 1880:

I have the honor to state that the mortality of this city during the three months ending December 31, 1880, was unusually high, having been 1,740 above the average deaths for the corresponding three months of the past nine years. The annual death-rate to every 1,000 inhabitants (United States census, taken in June, 1880, 1,206,577) was 26.75. The deaths from all the five classes of diseases showed a large increase during the quarter ending December 31, 1880, compared with the number that occurred during the corresponding quarters of the past five years. The mortality for the fourth quarter of 1880 was 8,068, against 6,474 for the corresponding quarter of 1879. More than 60 per cent. of the deaths during the fourth quarter of 1880 were from the following nine diseases, viz: Phthisis pulmonalis, 1,266; pneumonia, 800; bronchitis, 433; diphtheria, 647; Bright's disease and nephritis, 404; croup, 379; scarlatina, 341; diarrhœal diseases, 299, and diseases of the heart, 300. The greatest reduction in the number of deaths from any disease was from diarrhœal complaints, which were 1,872 lower than the number reported during the preceding quarter.

The deaths from zymotic diseases during the third quarter of the year exceeded the deaths of any of the other classes by 752, but the deaths during the fourth quarter of the year from the local class of diseases exceeded those of any of the other classes by 945. Compared with the corresponding quarter of 1879, the deaths from zymotic diseases showed an increase of 833; from constitutional diseases, 173; from local diseases, 424; developmental diseases, 96, and from violence, 68; and, compared with the preceding quarter, the deaths from zymotic diseases decreased 1,050 and violence 17, while the deaths from constitutional diseases increased 24, local diseases 647, and developmental diseases 41.

The increase in the number of deaths during the 4th quarter of the year 1880, compared with the corresponding quarter of 1879, is as follows: Small-pox 24; scarlatina 234; diphtheria 429; croup 152; typhus fever 1; typhoid fever 22; puerperal diseases 44; diarrhœal diseases 4; alcoholism 10; cancers 26; phthisis pulmonalis 129; bronchitis 62; pneumonia 91; diseases of the heart 40; marasmus and scrofula 2; hydrocephalus and tubercular meningitis 14; meningitis and encephalitis 31; convulsions 17; Bright's disease and nephritis 66; suicide 8, and drowning 3; while the following diseases showed a decrease, viz: Measles 101; whooping-cough 15, and apoplexy 19. The deaths of children under 5 were 3,294, against 2,664; the number that died during the corresponding quarter of 1879, and the deaths of persons 70 years and upward, were 601 against 485 that died during the corresponding period of last year.

The number of cases reported to the sanitary bureau during the 3 months ending December 31, 1880, of small-pox was 59, measles 266, scarlatina 1,550, cerebro-spinal fever 39, diphtheria 1,683, and typhoid fever 194. The number of cases of small-pox reported for every death from that disease was 2.36, measles 15.64, scarlatina 4.55, diphtheria 2.60, and typhoid fever 2.49.

The total number of deaths in tenement houses was 4,445, in houses containing less than 4 families 2,021, in hotels and boarding houses 86, in rivers, streets, boats, &c., 90, in institutions 1,362, and the balance were in dwellings the variety of which was not stated.

The mean meteorological observations for the quarter as furnished by D. Draper, director of the meteorological observatory at Central Park, are as follows, viz: In October the mean temperature Fahr. was 53.62, November 38.72, December 26.53. The mean pressure (barometric) in October was 29.969, in November 30.083, in December 29.854. The mean humidity (saturation being 100) was 81 in October, 82 in November, and 90 in December; the number of miles traveled by the wind was 5,172 in October, 5,504 in November, and 7,270 in December. The total rainfall was 2.81 inches in October, 2.46 in November, and 2.27 in December. The mean temperature Fahr. for the 4th quarter of 1880 was therefore 4.07 degrees lower, the mean pressure .057 lower, the mean rainfall .03 lower; the mean humidity was 4 higher, and the number of miles traveled by the wind was 4,532 greater than during the corresponding quarter of 1879.

Deaths in New York City, by quarters, for the past ten years, ending December 31, 1880.

Quarters.	1871.	1872.	1873.	1874.	1875.
First	6,555	7,510	6,967	6,552	7,842
Second	6,597	8,824	6,605	6,542	7,064
Third	7,924	9,958	9,018	8,625	9,256
Fourth	5,900	6,355	6,494	7,008	6,547
Total	26,976	32,647	29,084	28,727	30,709

Quarters.	1876.	1877.	1878.	1879.	1880.
First	7,633	6,002	6,664	7,576	8,814
Second	6,704	6,047	6,334	6,666	8,622
Third	8,998	8,165	7,645	7,686	8,423
Fourth	5,817	5,989	6,365	6,474	8,068
Total	29,152	26,203	27,008	28,342	33,927

Comparative table of mortality from the principal causes of death in the fourth quarter of the year 1880, with the corresponding quarter of the preceding five years.

Causes of death.	1880.	1875.	1876.	1877.	1878.	1879.	Total for 5 years preceding 1880.	Average for 5 years preceding 1880.
Total deaths from all causes	8,068	6,547	5,817	5,989	6,365	6,474	31,192	6,238.4
Total zymotic diseases	2,265	1,984	1,338	1,505	1,587	1,432	7,846	1,569.2
Total constitutional diseases	1,775	1,373	1,398	1,430	1,585	1,602	7,388	1,477.6
Total local diseases	3,210	2,520	2,437	2,367	2,493	2,786	12,603	2,520.6
Total developmental diseases	505	422	402	440	446	409	2,119	423.8
Deaths by violence	313	248	242	247	254	245	1,236	247.2
Small-pox	25	182	7	.....	.....	*1	190	38.0
Measles	17	51	22	36	14	118	241	48.2
Scarlatina	341	104	198	202	359	107	970	194.0
Diphtheria	647	683	323	335	281	218	1,840	368.0
Membranous croup	379	239	161	164	134	227	925	185.0
Whooping-cough	56	67	65	79	93	71	375	75.0
Typhus fever	2	6	2	2	.....	1	11	2.2
Typhoid fever	78	96	76	96	90	56	414	82.8
Puerperal diseases	95	73	79	71	66	51	340	68.0
Diarrhœal diseases of children under five years	222	229	161	253	242	234	1,119	223.8
Diarrhœal diseases of all ages	299	292	217	318	315	295	1,437	287.4
Alcoholism	67	38	32	19	39	57	185	37.0
Cancer	159	88	128	121	125	133	595	119.0
Phthisis pulmonalis	1,266	998	1,035	1,015	1,170	1,137	5,355	1,071.0
Bronchitis	433	287	321	289	315	371	1,583	316.6
Pneumonia	800	653	587	521	548	709	3,018	603.6
Heart diseases	300	256	273	244	287	260	1,320	264.0
Marasmus—tabes mesenterica and scrofula	164	117	98	133	128	162	638	127.6
Hydrocephalus and tubercular meningitis	127	116	90	113	116	113	548	109.6
Meningitis and encephalitis	130	128	138	128	124	99	617	123.4
Convulsions	170	141	138	139	122	153	693	138.6
Direct effect of solar heat	.....	.....	.....	.....	.....	.....	.....	.....
Apoplexy	119	98	91	74	119	138	520	104.0
All diseases of the brain and nervous system	624	505	526	529	523	556	2,630	526.0
Bright's disease and nephritis	404	291	260	306	304	338	1,499	299.8
Deaths by suicide	33	25	30	43	39	25	162	32.4
Deaths by drowning	29	16	25	36	25	26	128	25.6
Deaths in institutions	1,362	1,041	981	980	1,025	1,192	5,219	1,043.8
Deaths of persons seventy years old and over	601	415	448	434	444	485	2,226	445.2
Deaths of children under one year of age	1,596	1,430	1,229	1,313	1,359	1,525	6,856	1,371.2
Deaths of children under two years of age	2,252	2,042	1,665	1,876	1,887	2,079	9,549	1,909.8
Deaths of children under five years of age	3,294	2,860	2,260	2,487	2,554	2,664	12,825	2,565.0

*This case arrived in steamship "Mikado," was sent to Quarantine Hospital, and thence to Riverside Hospital, where death occurred. The patient was never vaccinated.

Mortality from the principal causes of death, by months, for the fourth quarter of 1880 and 1879, with the mean meteorological observations.

[Population by United States census taken June, 1880, 1,206,577. Death rate per 1,000 inhabitants, 26.75.]

Meteorology and causes of death.	Year.	October.	November.	December.	Total for the fourth quarter.
METEOROLOGY.*					
Mean temperature (Fahr.)	1879	60.33	43.41	37.32	43.69
Do	1880	53.62	38.72	26.53	39.62
Mean reading of barometer	1879	30.032	29.999	30.048	30.026
Do	1880	29.969	30.083	29.854	29.969
Mean humidity (saturation 100)	1879	73	81	86	80
Do	1880	81	82	90	84
Number of miles traveled by the wind	1879	3,804	4,647	4,963	13,414
Do	1880	5,172	5,504	7,270	17,946
Total rainfall (inches)	1879	0.43	2.20	4.94	7.57
Do	1880	2.81	2.46	2.27	7.54
CAUSES OF DEATH.					
Total deaths from all causes	1879	2,118	2,189	2,167	6,474
Do	1880	2,569	2,561	2,938	8,068
Total zymotic diseases	1879	537	448	447	1,432
Do	1880	748	753	764	2,265
Total constitutional diseases	1879	542	533	528	1,603
Do	1880	592	556	627	1,775
Total local diseases	1879	840	958	991	2,789
Do	1880	984	978	1,248	3,210

*From the New York Meteorological Observatory, Central Park.

Mortality from the principal causes of death, &c.—Continued.

Meteorology and causes of death.	Year.	October.	November.	December.	Total for the fourth quarter.
CAUSES OF DEATH—Continued.					
Total developmental diseases	1879	116	159	130	405
Do	1880	151	153	201	505
Deaths by violence	1879	83	91	71	245
Do	1880	94	121	98	313
Small-pox	1879	.....	1	.....	1
Do	1880	2	4	19	25
Measles	1879	13	31	74	118
Do	1880	1	6	10	17
Scarlatina	1879	31	41	35	107
Do	1880	54	119	168	341
Diphtheria	1879	71	76	71	218
Do	1880	199	234	214	647
Membranous croup	1879	51	97	79	227
Do	1880	108	139	132	379
Whooping-cough	1879	27	23	21	71
Do	1880	21	18	17	56
Erysipelas	1879	7	13	11	31
Do	1880	7	8	11	26
Typhus fever	1879	1	.....	.....	1
Do	1880	1	1	.....	2
Typhoid fever	1879	28	9	19	56
Do	1880	30	29	19	78
Cerebro-spinal fever	1879	7	10	7	24
Do	1880	13	14	12	39
Puerperal diseases	1879	10	24	17	51
Do	1880	30	20	45	95
Remittent, intermittent, typho-malarial, congestive, and simple continued fevers	1879	37	31	23	91
Do	1880	47	43	39	129
Diarrhœal diseases of children under five years	1879	163	42	29	234
Do	1880	154	42	26	222
Diarrhœal diseases, all ages	1879	194	61	40	295
Do	1880	184	72	43	299
Inanition, want of breast milk, etc	1879	24	13	20	57
Do	1880	37	20	23	80
Alcoholism	1879	19	20	18	57
Do	1880	20	19	28	67
Rheumatism and gout	1879	13	18	9	40
Do	1880	13	12	16	41
Cancer	1879	41	43	49	133
Do	1880	50	56	53	159
Phthisis pulmonalis	1879	367	389	381	1,137
Do	1880	408	399	459	1,266
Bronchitis	1879	111	126	134	371
Do	1880	112	126	195	433
Pneumonia	1879	171	268	270	709
Do	1880	205	246	349	800
Heart diseases	1879	81	102	77	260
Do	1880	96	83	121	300
Aneurism	1879	6	4	9	19
Do	1880	6	6	10	22
Marasmus, tabes mesenterica, and scrofula	1879	77	41	44	162
Do	1880	59	52	53	164
Hydrocephalus and tubercular meningitis	1879	38	36	39	113
Do	1880	54	29	44	127
Meningitis and encephalitis	1879	36	28	35	99
Do	1880	49	45	36	130
Convulsions	1879	59	46	48	153
Do	1880	56	50	64	170
Direct effect of solar heat	1879	.....	.....	.....	.....
Do	1880	.....	.....	.....	.....
Cirrhosis of liver and hepatitis	1879	22	22	20	64
Do	1880	35	27	28	90
All diseases of the brain and nervous system	1879	190	162	205	557
Do	1880	207	211	206	624
Apoplexy	1879	39	41	58	138
Do	1880	39	43	37	119
Enteritis, gastro-enteritis, peritonitis, and gastritis	1879	42	31	24	97
Do	1880	63	51	42	156
Bright's disease and nephritis	1879	102	120	116	338
Do	1880	128	113	163	404
Cyanosis and atelectasis	1879	16	26	21	63
Do	1880	13	17	21	51
Deaths by suicide	1879	9	10	6	25
Do	1880	8	17	8	33
Premature and preternatural births	1879	51	51	47	149
Do	1880	58	49	66	173
Deaths by drowning	1879	13	11	2	26
Do	1880	14	10	5	29
Surgical operations	1879	6	6	3	15
Do	1880	.....	4	5	9
Deaths in institutions	1879	394	387	411	1,192
Do	1880	402	456	504	1,362
Deaths of persons seventy years old and over	1879	139	173	173	485
Do	1880	169	211	221	601
Deaths of children under one year of age	1879	596	476	453	1,525
Do	1880	555	484	557	1,596
Deaths of children under two years of age	1879	779	662	638	2,079
Do	1880	776	679	797	2,252
Deaths of children under five years of age	1879	955	859	850	2,664
Do	1880	1,073	1,045	1,176	3,294

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 12, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	5	7.7			5						2				1				1	
Bangor, Me	16,857	8	24.7			8						3								2	
Concord, N. H	13,838	2	7.5			2															
Burlington, Vt	11,364	3	13.8			3						1									
Boston, Mass	362,535	173	24.9	356,555	6,000	171	2	25.2	17.4			69				10		1		21	2
Cambridge, Mass	52,740	15	14.7			15						5								4	
Edgartown, Mass	1,301																				
New Bedford, Mass	26,875	11	21.4			9	2					3				1					1
Newburyport, Mass	13,537	4				4						1									
Marblehead, Mass	7,467	5	34.9			5														2	
Nantucket, Mass	3,726	2	27.6			2														1	
Plymouth, Mass	7,094																				
Fall River, Mass	49,006	26	27.7									8						3		4	
Lowell, Mass	59,485	20	17.5			19	1					5								2	
Lawrence, Mass	39,178	10	13.3			10						4						1		3	
Pittsfield, Mass	13,367	1	3.9			1															
Worcester, Mass	58,295	30	26.8									13				1				6	
Lynn, Mass	38,284	11	15.0									4								3	
Holyoke, Mass	21,851	8	19.1			8						5								1	
Bridgewater, Mass	3,620	1	14.4			1															
Chicopee, Mass	11,323	3	13.8			3						1								1	
Fitchburgh, Mass	12,405	3	12.6			3						1									
Somerville, Mass	24,985	13	27.1			13						4								3	
Springfield, Mass	33,340	13	20.3									5								3	
Spencer, Mass	7,466	3	20.9			3						3									
Quincy, Mass	10,529	5	24.8			5						2						1		1	
Northampton, Mass	12,172	5	21.6			5						1								2	
North Adams, Mass	10,192	9	46.2			9						1								2	
Haverhill, Mass	18,475	8	22.6			8						3						1		1	
Gloucester, Mass	19,329	5	13.7			5														3	
Chelsea, Mass	21,785	5	11.9			5						2								1	
Attleborough, Mass	11,109	2	9.3			2						1									
Malden, Mass	12,017	1	4.3			1						1				1					
Salem, Mass	27,500	7	13.2			7														1	
Taunton, Mass	21,200	8	19.4			8						1				1		1		1	
Westboro', Mass	5,217	2	20.0			2						1									
Woburn, Mass	10,982	6	28.7			6						1								3	
Weymouth, Mass	10,571	6	29.7			6										1					
Waltham, Mass	11,711	4	17.7			4														1	
Webster, Mass	5,696	3	27.5			3						2									
Westfield, Mass	7,700	2	13.6			2															
Brookline, Mass	8,200	1	6.3			1															
Newton, Mass	16,996	6	18.2			6						1									
Providence, R. I	104,850	39	19.4	100,862	3,800	39		20.1				7								7	
New Haven, Conn	62,882	37	30.7			35	2					8	2			1				6	
New Britain, Conn	13,978	6	22.4			6															
Waterbury, Conn	20,269	9	23.2			9						4								1	
Fairfield, Conn	3,478																				
Norwich, Conn	21,150	8	19.4									2									
New York, N. Y	1,206,577	750	32.4	1,186,144	20,433	727	23	31.9	58.7			301				16		14		122	
Brooklyn, N. Y	566,689	246	22.8			243	3					105	3			8				31	
Yonkers, N. Y	18,892	5	13.8			5						1						1		2	
Poughkeepsie, N. Y	20,207	3	7.7			3						2						1		1	
Newburgh, N. Y	18,050	5	14.5			5						2									
Buffalo, N. Y	155,137	59	19.8			59						22				11				4	
Watertown, N. Y	10,697	4	19.5			4						2									
Binghamton, N. Y	17,315	7	21.1			7						4									
Cambridge, N. Y	1,850	1	29.1			1															
Seneca Falls, N. Y	6,000	2	17.4			2															
Tarrytown, N. Y	3,270	1	15.9			1															
Utica, N. Y	33,913	12	18.5			12						4						1			
Hudson County, N. J	187,950	89	24.7									32				3				10	
Newark, N. J	136,400	59	22.6			55	4					26								12	
Orange, N. J	13,206	6	23.7			5	1					2	1								
Camden, N. J	41,658	18	22.5			13	5					6	1							4	2
Plainfield, N. J	8,126	4	26.1			3	1					2	1								
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	401	24.7	815,182	31,798	382	19	24.4	31.2			125				6		2		58	7
Pittsburgh, Pa	156,381	71	23.7	152,290	4,091	69	2	23.7	26.1			29				5		1		7	
Erie, Pa	27,730	9	16.9			9						1						1		1	
Reading, Pa	43,280	13	15.6	42,926	354	12	1	14.6	147.3			4								1	
Wilmington, Del	42,499	17	20.9			14	3					4	2							1	
District of Columbia	180,000	95	27.4	120,000	60,000	43	52	18.6	45.1			14	28			2	1			9	10
Norfolk, Va	21,966	16	38.0			6	10					2	7				1			1	
Richmond, Va	63,803	22	18.0			6	16						4				1			1	5
Lynchburg, Va	15,959	10	32.7			4	6					1	4								
Wheeling, W. Va	32,000	16	26.1			16						5						1		2	
Wilmington, N. C	17,361	6	18.1			2	4					2									
Charleston, S. C	49,990	28	29.2	22,713	27,277	7	21	16.3	40.0				4			1					5
Augusta, Ga	23,023	7	15.9			4	3					1	1								
Atlanta, Ga	37,421	21	28.9	21,086	16,335	7	14	17.1	44.6			3	4			1					1
Savannah, Ga	30,681	17	28.9	15,007	15,674	5	12	17.4	38.5			3	6			1					2
Rome, Ga	5,000																				
Brunswick, Ga	2,900			1,500	1,400																
Jacksonville, Fla	8,000			5,000	3,000																
Mobile, Ala	31,205	9	15.0	16,927	14,378	7	2	21.6	7.3			2	1			1				1	
Selma, Ala	7,505	3	20.9	3,425	4,080		3		38.4				2								
Columbus, Miss	5,230	2	20.0	2,760	2,470	1	1	19.5	20.3				1								
Natchez, Miss	7,000	2	14.7	3,500	3,500	1	1	14.9	14.9												1
Vicksburg, Miss	11,814	3	13.2			1	2						1								
New Orleans, La	216,140	140	33.8	159,128	57,231	93	47	30.5	42.8			26	16							17	9
Shreveport, La	11,017	9	42.6			1	8						1								1
Baton Rouge, La	7,187	4	29.0	2,954	4,233		4		49.3												
Marshall, Tex	5,499	1	9.2	2,763	2,686	1		19.5													
[illegible]le Rock, Ark	13,185	7	27.7			3	4					1						1			2
[illegible]ville, Tenn	43,461	21	25.2	27,872	15,589	11	10	20.2	33.0				2	5							1

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 12, 1881.

Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Cities and States.
								Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.										
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
														2																Portland, Me.
1				1										1																Bangor, Me.
														1																Concord, N. H.
5		1		19				1				1		17				15		1		8								Burlington, Vt.
				1										3																Boston, Mass.
																														Cambridge, Mass.
								1							1									1				1		Edgartown, Mass.
														1																New Bedford, Mass.
																														Newburyport, Mass.
														1																Marblehead, Mass.
																														Nantucket, Mass.
																														Plymouth, Mass.
		1												3																Fall River, Mass.
								4				2		1	1	1		1										1		Lowell, Mass.
								2						1																Lawrence, Mass.
																						1								Pittsfield, Mass.
								1																						Worcester, Mass.
		1		1										5				3				2								Lynn, Mass.
												1		2																Holyoke, Mass.
														1																Bridgewater, Mass.
																														Chicopee, Mass.
																														Fitchburgh, Mass.
				2		2								1																Somerville, Mass.
						1						1		2																Springfield, Mass.
				2																										Spencer, Mass.
														3																Quincy, Mass.
														1																Northampton, Mass.
		1		1										2										1		1				North Adams, Mass.
														2																Haverhill, Mass.
																														Gloucester, Mass.
				2																		1								Chelsea, Mass.
																								1						Attleborough, Mass.
																														Malden, Mass.
																														Salem, Mass.
														1																Taunton, Mass.
														1																Westboro', Mass.
																														Woburn, Mass.
1																														Weymouth, Mass.
														1																Waltham, Mass.
1				1								1																		Webster, Mass.
																												1		Westfield, Mass.
																														Brookline, Mass.
														1				1												Newton, Mass.
1				2				1				3		5																Providence, R. I.
				1		1				1				7	1			3												New Haven, Conn.
														1																New Britain, Conn.
		2																												Waterbury, Conn.
																														Fairfield, Conn.
								1																						Norwich, Conn.
24		10		39		4		3		14		30		96				36		7		11		13		8		2		New York, N. Y.
5		3		35		2		1		5		15		18	1	1		9				2		3						Brooklyn, N. Y.
																								1						Yonkers, N. Y.
														1																Ponghkeepsie, N. Y.
														2																Newburgh, N. Y.
1				2								1		4				4												Buffalo, N. Y.
		1				1								1																Watertown, Conn.
												2		1								1								Binghamton, N. Y.
																				1										Cambridge, N. Y.
																														Seneca Falls, N. Y.
																														Tarrytown, N. Y.
				1										1				1												Utica, N. Y.
1				4						2		3		14				3						5						Hudson County, N. J.
1				1								1		5				5		2										Newark, N. J.
														2					1											Orange, N. J.
1										1				1				2												Camden, N. J.
			1											1				1												Plainfield, N. J.
																														Asbury Park, N. J.
4		2		4		3		6				13		25	2	2		9								38	7	3		Philadelphia, Pa.
				1		1		3				7		6	1	1		2								1		2		Pittsburgh, Pa.
				1										1		1														Erie, Pa.
			1	1				1				3		2																Reading, Pa.
1	1			1								1				1														Wilmington, Del.
1		1								1				9	13		3	1	2											District of Columbia.
	1		1	1											3									1						Norfolk, Va.
								1	1						2				1		2									Richmond, Va.
																														Lynchburg, Va.
				3				1						1				1												Wheeling, W. Va.
										1					3															Wilmington, N. C.
												2		1	4							1		1						Charleston, S. C.
									1					2																Augusta, Ga.
		1												2	5															Atlanta, Ga.
2		1	1					1						1	1				1					1						Savannah, Ga.
																														Rome, Ga.
																														Brunswick, Ga.
																														Jacksonville, Fla.
															1													1		Mobile, Ala.
															1															Selma, Ala.
															1															Columbus, Miss.
																														Natchez, Miss.
															1															Vicksburg, Miss.
1		1		1	1			1		1	1	6	1	10	11			4	1					1	1					New Orleans, La.
															2									1		1				Shreveport, La.
																														Baton Rouge, La.
																														Marshall, Tex.
			1									1																		Little Rock, Ark.
					1										2		1					1			1					Nashville, Tenn.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 12, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Memphis, Tenn	34,000	24	37.2	17,293	16,707	9	15	27.2	46.8	.....	.....	.....	3	4	.....	.....	.....	.....	.....	3	3
Clarksville, Tenn	7,250	1	7.2	4,000	3,250	1	.....	13.0	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....
Murfreesboro', Tenn	3,856	.....	.....	2,000	1,856	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisville, Ky	123,625	41	17.3	.....	.....	36	5	.....	.....	.....	.....	8	3	.....	.....	.....	.....	1	.....	5	1
Bowling Green, Ky	6,000	2	17.4	4,000	2,000	1	1	13.0	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Ohio	255,708	108	22.0	.....	.....	100	8	.....	.....	.....	.....	35	.....	.....	.....	3	.....	.....	.....	14	2
Cleveland, Ohio	160,140	71	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	12	.....
Gallipolis, Ohio	4,500	2	23.2	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton, Ohio	38,677	12	16.1	.....	.....	12	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	2	.....
Portsmouth, Ohio	11,314	9	41.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Indianapolis, Ind	75,074	30	20.9	.....	.....	25	5	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	1	.....	7	1
Richmond, Ind	12,743	4	16.4	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evansville, Ind	29,280	15	26.7	.....	.....	14	1	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	5	1	.....	.....
Chicago, Ill	503,304	190	19.7	.....	.....	.....	.....	.....	.....	.....	.....	79	.....	.....	.....	4	.....	6	.....	19	.....
Peoria, Ill	29,315	14	24.9	.....	.....	14	.....	.....	.....	.....	.....	5	.....	.....	.....	1	.....	.....	.....	1	.....
Aurora, Ill	11,825	5	22.1	.....	.....	5	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jacksonville, Ill	10,927	4	19.1	.....	.....	4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....
Elgin, Ill	8,770	3	17.9	.....	.....	3	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline, Ill	8,000	2	13.0	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Rock Island, Ill	11,660	7	30.6	.....	.....	7	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake, Ill	18,200	7	19.8	.....	.....	7	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....
Milwaukee, Wis	115,578	39	17.5	.....	.....	39	.....	.....	.....	.....	.....	16	.....	.....	.....	.....	.....	2	.....	5	.....
East Saginaw, Mich	19,016	12	32.9	.....	.....	12	.....	.....	.....	.....	.....	5	.....	.....	.....	1	.....	.....	.....	2	.....
Flint, Mich	9,000	3	17.4	.....	.....	3	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dubuque, Iowa	22,254	8	18.8	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Keokuk, Iowa	12,117	4	17.2	.....	.....	4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Louis, Mo	350,522	150	22.3	.....	.....	130	20	.....	.....	.....	.....	43	10	.....	.....	2	.....	9	.....	14	1
Kansas City, Mo	60,000	16	13.9	.....	.....	14	2	.....	.....	.....	.....	5	1	.....	.....	1	.....	.....	.....	4	.....
Omaha, Nebr	30,518	8	13.7	.....	.....	8	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....
Lawrence, Kans	8,500	4	24.0	e,800	1,700	4	.....	30.7	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	2	.....
Salt Lake City, Utah	20,768	7	17.6	.....	.....	7	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boulder, Colo	3,030	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Francisco, Cal	234,144	79	17.5	.....	.....	.....	.....	.....	.....	.....	.....	18	.....	.....	.....	5	.....	.....	.....	14	.....
Sacramento, Cal	21,500	15	36.8	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....
Vallejo, Cal	7,750	1	6.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Los Angeles, Cal	11,311	4	18.5	.....	.....	4	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	8,083,707	3,676	23.7	.....	.....	.....	.....	.....	.....	.....	.....	1,177	113	.....	.....	93	3	59	1	286	57

SANITARY LEGISLATION IN NEW YORK.

The following act relating to vital statistics was passed May 29, 1880:

The people of the State of New York, represented in senate and assembly, do enact as follows:

SECTION 1. Chapter four hundred and eighty-two of the laws of eighteen hundred and seventy-five, entitled "An act to confer on boards of supervisors further powers of local legislation and administration, and to regulate the compensation of supervisors," is hereby amended by adding thereto the following additional subdivisions to section one of said act:

* * * * * * *

REGISTRATION OF MARRIAGES, BIRTHS, AND DEATHS.

31. To provide for the registration, in the clerk's office in each town and village in the county, of every marriage, birth, and death which may occur in said town or village; such registration to be made upon the report, within three days of the event, of the attending clergyman, magistrate, or physician. Such registration to be made in books of record, properly bound, lettered, paged, ruled, printed, indexed and prepared for the purpose, and furnished whenever necessary, and upon a written demand of the said clerk, by the board of supervisors to each town or village; the expense of which books shall be a proper county charge, to be paid for as a charge in the general expenses of the county. Such books shall be so ruled and printed that sufficient space shall be had between the lines and columns of each page thereof to clearly and fully record the date, name, residence, locality, giving the street and number if possible, age, and disease of each person dying; and the name or names, color, age and nationality of every person married, and the date thereof; and the name or names of the parent or parents, together with the sex, color, date and place of birth of each child so born.

32. To provide by ordinance, rule, resolution, or regulation for the non-removal of any dead body to any place without the limits of the said county, or to prevent the bringing to or within the limits of said county of any dead body by any railroad or steamboat corporation, or by any express company or common carrier, or by any other person or persons or corporations whatsoever; or the burial or interment of any dead body within the said county without a burial permit first being had and obtained; such permit to be based upon a medical certificate of the cause of death, or upon a coroner's inquest, or, in case where no medical certificate can be obtained, and no coroner's inquest has been held or required by law, such permit may be granted upon affidavit, duly verified by some person or persons known to the office granting such permit, stating the circumstance, time, and cause of death, as nearly as the same can be ascertained, and to be issued by the clerk or a justice of the peace or police justice of the town or village in which such death occurs, or where such burial or interment is to be made, and to be recorded by him. To provide books and blank forms of permits and of medical certificates, properly printed and ruled for use for such purposes as aforesaid, and to be furnished and paid for as is provided for the books required in the next preceding section hereto. Such books and such permits shall, in each case, contain the name of the person or corporation to whom such permit of removal or of burial is given. Any willful non-observance or disobedience of any rules, ordinances, regulations, or resolutions of said board of supervisors, made in accordance with the powers hereby granted, shall be deemed a misdemeanor, and be punishable as such.

33. To fix the amount and provide for the payment of the registration fees in all such cases as aforesaid, and to provide for obtaining copies of such records and for the amount and payment of fees for such copies. Such copies duly attested by said town or village clerk shall be admitted in all the courts of this State as *prima facie* evidence of the facts therein set forth.

* * * * * * *

35. To provide for and use all necessary means for the prevention of and to prevent the spread of all infectious and contagious diseases, and for the payment of all expenses necessarily incurred therefor.

SEC. 2. This act shall take effect immediately.

STATE OF NEW YORK,
Office of the Secretary of State, ss:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom and of the whole of said original law.

JOSEPH B. CARR,
Secretary of State.

Under the powers conferred by the above act the board of supervisors of Westchester County have adopted rules and regulations for securing a proper record of marriages, births, and deaths within their jurisdiction.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 12, 1881—Continued.

Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Cities and States.
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	4	....	....	....	....	....	....	....	1	....	....	....	....	....	....	Memphis, Tenn.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Clarksville, Tenn.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Murfreesboro', Tenn.
1	....	....	....	....	....	....	....	1	....	....	....	....	....	5	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Louisville, Ky.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Bowling Green, Ky.
....	....	1	....	4	....	....	....	2	....	....	....	4	....	11	1	....	....	5	....	....	....	1	....	4	....	1	....	1	....	Cincinnati, Ohio.
1	....	....	....	3	....	....	....	....	....	....	....	4	....	....	....	4	....	1	....	....	....	....	....	....	....	....	....	1	....	Cleveland, Ohio.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Gallipolis, Ohio.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	3	....	....	....	....	....	Dayton, Ohio.
....	....	1	....	....	....	....	....	1	1	....	....	....	....	3	1	2	....	....	....	....	....	1	....	....	....	....	....	....	....	Portsmouth, Ohio.
....	....	1	....	1	....	1	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Indianapolis, Ind.
....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	Richmond, Ind.
....	....	1	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	Evansville, Ind.
8	....	2	....	9	....	2	....	4	....	3	....	1	....	15	....	1	....	4	....	2	....	1	....	3	....	8	....	1	....	Chicago, Ill.
....	....	....	....	1	....	....	....	....	....	....	....	1	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Peoria, Ill.
2	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Aurora, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	Jacksonville, Ill.
....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	Elgin, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Moline, Ill.
....	....	1	....	....	....	....	....	3	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	Rock Island, Ill.
....	....	....	....	....	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Lake, Ill.
1	....	....	....	1	....	....	....	1	....	....	....	1	....	5	....	1	....	1	....	....	....	1	....	....	....	....	....	....	....	Milwaukee, Wis.
1	....	3	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	East Saginaw, Mich.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Flint, Mich.
....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Dubuque, Iowa.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Keokuk, Iowa.
1	....	5	....	1	....	....	....	1	....	4	1	1	....	8	6	1	....	4	....	....	....	1	....	2	....	....	....	....	....	Saint Louis, Mo.
....	....	2	1	....	....	1	....	....	....	....	....	....	....	2	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	Kansas City, Mo.
....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Omaha, Nebr.
....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Lawrence, Kans.
1	....	1	....	2	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Salt Lake City, Utah.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Boulder, Colo.
....	....	3	....	....	....	....	....	1	....	....	....	....	....	7	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	San Francisco, Cal.
....	....	1	....	2	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Sacramento, Cal.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Vallejo, Cal.
....	....	1	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Los Angeles, Cal.
68	3	49	7	154	1	20	....	45	3	33	4	121	1	343	70	20	4	117	6	14	2	36	2	42	3	58	7	14	....	

ABSTRACTS FROM CONSULAR REPORTS.

COPENHAGEN, DENMARK.—The Department of State forwards the following translation of a notice issued by the Danish Government relating to certain ports infected with yellow fever:

The provisions contained in section 2 of the law relating to precautions against the introduction of infectious diseases into the kingdom are to be enforced on the 2d day of July, 1880, and to remain in force until further notice, as regards vessels coming from the ports of Caracas, La Guayra, and Porto Cabello; also, concerning the prohibition to import articles from the above-named ports, &c.

In view of the fact that, according to advices received, numerous cases of yellow fever have occurred in the said cities, the following provisions are hereby established until further notice, in connection with the law concerning precautions against the introduction of infectious diseases. These provisions are to take effect July 2, 1880, and to remain in force until further notice:

1. The provisions contained in section 2 of the aforesaid law are to be enforced in the case of vessels coming from, or having had dealings with, the ports of Caracas, La Guayra, or Porto Cabello, or in the case of those which on their passage have received persons from, or sent persons on board of, such a vessel.

2. The importation into the kingdom from the aforesaid ports of linen that has been used, wearing apparel that has been used, and bed-clothes that have been used, provided such articles do not belong to the baggage of persons, is hereby forbidden. Linen, wearing apparel, and bed-clothes brought from the aforesaid ports as baggage shall be cleansed under proper supervision.

The cleansing referred to in the foregoing paragraph shall, if possible, take place in a disinfecting oven, in which the articles to be disinfected shall be subjected to a heat of 120° Celsius (248 Fahr.). In default of such an oven, or if such a one cannot be used, the articles shall be fumigated for six hours with sulphur, five grams of which for each cubic yard shall be burned in a tightly-closed space.

HAVANA, CUBA.—During the week ending March 12, one death from yellow fever and 21 from small-pox are reported.

RIO DE JANEIRO, BRAZIL.—The reports of United States consul T. Adamson, for the two weeks ending February 12, give 35 deaths from yellow fever and 2 from small-pox. Yellow fever is slowly increasing, but is not yet considered epidemic, and the port is regarded as unusually free from fevers, for the season of the year.

The following reports for the week ending March 12, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 29; under 5 years 15, accident 1, cerebro-spinal meningitis 1, consumption 1, typhoid fever 2, scarlet fever 5, pneumonia 3, bronchitis 1, measles 1. Bath, Me., 8,000; death, 1; congestion of lungs 1. Belfast, Me., 5,308; deaths, 3; consumption 2, pneumonia 1. Brattleborough, Vt., 6,000; death, 1; under 5 years 1. Bucyrus, Ohio, 3,950; death, 1. Calais, Me., 6,162; death, 1; under 5 years 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 5; under 5 years 1, accident 1, consumption 2, erysipelas 1, measles 1. Circleville, Ohio, 5,996; no deaths. Clinton, Mich., 1,200; no deaths. Columbus, Ga., 10,000; deaths, 3; under 5 years 1, pneumonia 2. Corinth, Miss., 2,264; death, 1. Crystal Springs, 955; no deaths. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; death, 1. Hernando, Miss., 1,000; no deaths. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; deaths, 2; scarlet fever 1, pneumonia 1. Iuka, Miss., 816; deaths, 1. Jefferson, Tex., 3,251; no deaths. Louisiana, Mo., 5,200; deaths, 2; under 5 years 1, congestion of lungs 1, puerperal 1. Madison, Ind., 9,009; deaths, 4; consumption 1, bronchitis 1. Marquette, Mich., 4,030; deaths, 2; puerperal 1. Martinsburg, W. Va., 6,384; deaths, 4; under 5 years 2, accidents 2, typhoid fever 1. Meridian, Miss., 4,013; death, 1. Milan, Tenn., 1,800; deaths, 2; pneumonia 1, puerperal 1. Milledgeville, Ga., 3,000; no deaths. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,412; deaths, 5; under 5 years 1, consumption 2, scarlet fever 2. Niles, Mich., 4,200; death, 1. Painesville, Ohio, 5,504; no deaths. Pass Christian, 1,500; no deaths. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; death, 1; under 5 years 1, pneumonia 1. Port Gibson, Miss., 1,200; no death. Rensselaer, Ind., 900; death, 1; under 5 years 1, measles 1. Senatobia, Miss., 935; death, 1; bronchitis 1. Starkville, Miss., 1,454; death, 1; lung disease 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; no deaths. Winchester, Va., 5,000; deaths, 2; scarlet fever 2. Youngstown, Ohio, 15,421; deaths, 5; under 5 years, 2; typhoid fever 1, pneumonia 2, bronchitis 1. Total population, 245,303; deaths under 5 years, 27; total number of deaths, 81; annual rate per 1,000, 17.2.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Cuba	Havana	195,437	1880-'81. Mar. 5	156					3		31							71
Mexico	Vera Cruz	20,000	Feb. 6	14					2		2							78
Do	do	20,000	Feb. 20	32					4		6							71
Do	do	20,000	Feb. 27	33					6		12							76
Teneriffe	Santa Cruz	16,610	Feb. 5	12						1		3	1			1		67
Do	do	16,610	Feb. 12	6						1		2						68
Ireland	Queenstown	10,000	Mar. 5	4														
Scotland	Dundee	155,100	Feb. 26	68												3		36
England	London	3,707,130	Feb. 26	1,525	21.5						44		12				91	34
Do	Cardiff	83,389	Mar. 5	35	21.8								1				1	36
Do	Bristol and Clifton	213,500	Feb. 26	98									1				4	38
Do	Bradford	197,196	Feb. 26	80	20.5												4	
Do	Tunstall	27,775	Mar. 5	11	20.6													37
France	Havre	92,068	Feb. 26	52														41
Do	Rouen	104,209	Feb. 26	43														
Switzerland	Geneva	50,066	Feb. 12	15														
Do	do	50,066	Feb. 19	21														
Do	do	50,066	Feb. 26	17														
Do	Zurich*		Feb. 26	10								1						
Germany	Berlin	1,123,571	Feb. 19	522	24.2							12	4	1		115	50	38
Do	Breslau	273,000	Feb. 19	127													4	40
Do	Brunswick	74,000	Feb. 26	31											1		1	33
Do	Mannheim	53,500	Feb. 26	18														38
Do	do	53,500	Mar. 5	18														37
Bavaria	Nuremberg	99,519	Feb. 12	51									1					35
Do	do	99,519	Feb. 19	53									1				8	35
Saxony	Dresden	220,216	Feb. 19	91								1	1			9	9	38
Do	Leipsic	151,616	Feb. 26	63	21.6								1				5	34
Do	Chemnitz	95,135	Feb. 19	50														25
Italy	Leghorn	98,224	Feb. 26	56									1					53
Do	Naples	461,571	Dec. 25	290									2				7	52
Austria	Trieste	128,295	Feb. 12	101							1						3	
Hungary	Buda Pesth	370,037	Feb. 6	274							12		4				6	
Do	do	370,037	Feb. 12	266							13		4				12	
Do	do	370,037	Feb. 19	266							8		4				3	
Norway	Christiania	120,000	Feb. 19	50								7	1			16	3	18
Egypt	Alexandria	220,000	Feb. 26	138														
Barbary	Tripoli	20,000	Feb. 19	13														66
Do	do	20,000	Feb. 26	7														68
Cape Colony	Cape Town	35,000	Feb. 14	27														60
East Indies	Calcutta	429,535	Feb. 5	281	34.1		18				4		18		1		4	66

* The population of Zurich is omitted till corrected by the new census.

MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
	1880–'81.																			
Providence, R. I	December	104,852	41	163	18.6	33	4	.....	5	2	.....	5	.....	27	.....	4	.....	2	.....	5
Do	January	104,852	49	190	21.7	41	7	3	7	3	.....	5	.....	34	.....	7	.....	.....	.....	4
Do	February	104,852	48	163	18.6	22	6	4	7	3	.....	8	.....	33	1	4	.....	1	.....	3
New Haven, Conn	January	63,500	.....	106	20.0	18	5	3	5	1	.....	1	.....	15	.....	2	.....	.....	17	2
Do	February	63,500	20	90	17.0	21	2	1	4	1	1	.....	.....	11	.....	.....	.....	.....	11	.....
New London, Conn	January	10,530	.....	9	10.3	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Amsterdam, N. Y	do	9,360	3	13	16.6	1	.....	.....	.....	.....	.....	1	.....	2	.....	.....	3	.....	.....	.....
Do	February	9,360	3	20	25.6	2	.....	.....	.....	2	.....	.....	.....	2	.....	.....	2	.....	.....	.....
Elmira, N. Y	do	22,000	12	40	21.8	4	1	1	1	1	.....	4	.....	5	.....	.....	.....	.....	.....	2
Kingston, N. Y	January	19,000	7	14	8.8	3	2	.....	3	1	.....	3	.....	1	.....	.....	.....	.....	.....	1
Do	February	19,000	4	10	6.3	1	.....	.....	.....	1	1	.....	.....	3	.....	1	.....	.....	.....	.....
Yonkers, N. Y	January	19,000	7	32	20.2	8	2	.....	.....	.....	.....	2	.....	8	.....	.....	.....	.....	.....	.....
Do	February	19,000	4	18	11.4	2	1	.....	.....	.....	.....	.....	.....	4	.....	2	.....	.....	.....	.....
Hudson County, N. J	January	187,950	153	370	23.6	42	18	2	10	10	7	7	.....	69	1	5	5	.....	.....	15
Paterson, N. J	do	50,950	34	98	23.1	6	6	1	1	.....	.....	.....	.....	21	.....	.....	.....	.....	.....	1
Do	February	50,950	39	97	22.9	1	3	2	1	.....	.....	2	.....	16	.....	.....	.....	.....	.....	2
Vineland, N. J	January	8,000	.....	3	4.5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	February	8,000	.....	9	13.5	2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
Scranton, Pa	December	40,000	18	46	13.8	5	2	3	1	1	.....	3	.....	13	.....	2	.....	.....	9	5
Do	January	40,000	14	43	12.9	5	4	1	.....	2	.....	1	.....	5	.....	.....	.....	.....	8	2
Do	February	40,000	20	62	18.6	3	1	1	1	3	.....	4	.....	10	.....	1	.....	.....	10	.....
Allentown, Pa	January	18,000	15	47	31.3	3	1	.....	.....	1	.....	20	.....	1	.....	2	.....	.....	.....	2
New Castle, Pa	do	8,250	4	20	29.1	.....	.....	.....	.....	3	.....	2	.....	4	.....	.....	.....	.....	.....	1
Do	February	8,250	4	24	34.9	.....	.....	.....	1	.....	1	10	.....	1	.....	.....	.....	.....	.....	1
Wilmington, Del	do	42,500	33	96	27.1	19	1	1	2	3	2	5	.....	13	.....	2	1	.....	.....	.....
District of Columbia	January	180,000	106	340	22.6	69	3	5	11	5	7	5	.....	53	2	6	.....	2	48	6
Norfolk, Va	do	21,966	18	62	33.9	7	1	5	4	1	3	1	.....	17	.....	.....	.....	.....	16	1
Do	February	21,966	21	50	27.3	5	.....	1	4	.....	1	.....	.....	12	.....	.....	.....	.....	6	2
Petersburg, Va	January	22,000	10	39	21.3	8	1	1	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....
Do	February	22,000	19	54	29.5	13	.....	2	.....	.....	2	.....	.....	5	.....	.....	.....	.....	.....	.....
Lynchburg, Va	do	15,959	19	45	33.8	4	.....	.....	1	1	.....	.....	.....	6	.....	1	.....	1	.....	1
Mobile, Ala	December	31,205	26	84	32.3	23	2	7	.....	2	1	.....	.....	5	.....	.....	.....	.....	17	5
Selma, Ala	January	7,505	5	16	25.6	2	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	2
Do	February	7,505	5	10	16.0	1	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....
Nashville, Tenn	December	43,461	24	73	20.1	13	1	6	1	3	.....	.....	.....	8	.....	.....	.....	.....	.....	2
Do	January	43,461	31	90	24.9	12	1	2	1	.....	3	3	.....	15	2	1	.....	.....	.....	7
Do	February	43,461	23	65	17.9	5	1	2	.....	.....	.....	1	.....	9	7	.....	.....	1	.....	1
Shelby County, Tenn	do	35,593	34	113	38.1	.....	3	13	2	.....	12	1	.....	21	.....	2	.....	.....	.....	5
Humboldt, Tenn	January	2,000	.....	4	24.0	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	February	2,000	.....	2	12.0	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheeling, W. Va	do	32,000	12	41	15.4	4	1	1	2	2	.....	.....	.....	10	.....	.....	.....	.....	.....	2
Detroit, Mich	do	116,342	66	175	18.0	18	6	6	4	.....	.....	.....	.....	18	2	6	.....	.....	.....	8
Lansing, Mich	December	8,326	4	8	11.5	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	January	8,326	4	11	15.8	1	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1
Do	February	8,326	.....	8	11.5	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Chicago, Ill	January	503,298	254	976	23.2	99	57	31	13	.....	.....	.....	.....	158	4	23	18	2	.....	34
Do	February	503,298	380	836	19.9	76	41	15	44	15	8	22	.....	125	.....	27	83	8	223	22
Lake, Ill	do	18,200	17	30	19.8	1	.....	.....	1	.....	1	.....	.....	8	.....	2	.....	1	.....	1
Milwaukee, Wis	January	115,578	111	223	23.1	18	6	.....	19	1	2	30	.....	36	2	7	.....	.....	63	2
Do	February	115,578	99	187	19.3	17	4	2	8	1	2	23	.....	24	2	6	.....	.....	46	3
Saint Paul, Minn	January	41,500	21	56	16.2	3	4	1	1	4	.....	1	.....	8	1	1	.....	.....	.....	.....
Do	do	41,500	31	61	17.6	6	3	.....	5	2	.....	.....	.....	8	2	.....	.....	.....	.....	3
Keokuk, Iowa	do	12,117	4	19	18.9	2	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	1
Do	February	12,117	.....	12	11.9	1	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Oakland, Cal	January	35,000	7	27	9.2	2	1	1	.....	.....	1	.....	.....	3	.....	.....	.....	.....	.....	1

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE MONTH ENDING FEBRUARY 28, 1881.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fe mal			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
German Hospital	New York, N. Y	General	100	87	5	3	1	4					3	2				3		3						3		
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	5																								
Saint Mary's Hospital	Rochester, N. Y	do	320	320	2	1	5										1	1										
Saint Michael's Hospital	Newark, N. J	do	140	148	8	7	6	9						1														
Jewish Hospital	Philadelphia, Pa	do	40	22	1																							
Homeopathic Hospital	Pittsburgh, Pa	do	40	26																	2	2						
Freedmen's Hospital	Washington, D. C	do	300	263	5		6						1		1						1							2
Providence Hospital	do	do	160	105	4		1	10																				
Cincinnati Hospital	Cincinnati, Ohio	do	500		21	22	7	25					4	3		5					1	1		4	4			
Saint Luke's Hospital	Detroit, Mich	do	25	13	1																							
Naval Hospital	Brooklyn, N. Y	do	115	61		2	1	2														1						
Do	Mare Island, Cal	do	77	44		2		2								1												
Hospital for Insane	Middletown, Conn	Insane	570	554																								
Willard Asylum	Willard, N. Y	do		1677			3																					
State Hospital for Insane	Danville, Pa	do	700	394																								
State Lunatic Asylum	Austin, Tex	do	381	380																								
Michigan Asylum	Kalamazoo, Mich	do	690	579			2											1										
Insane Asylum of California	Stockton, Cal	do	1108	1107			2																					

Name of hospital.	Place.	Character of hospital.	Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Total			
			Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
German Hospital	New York, N. Y	General					3	4		5																
Saint Barnabas Hospital	Poughkeepsie, N. Y	do																								
Saint Mary's Hospital	Rochester, N. Y	do	1				1		2						1											
Saint Michael's Hospital	Newark, N. J	do					1	3		1																
Jewish Hospital	Philadelphia, Pa	do					1	2																		
Homeopathic Hospital	Pittsburgh, Pa	do					4	1		1										1						
Freedmen's Hospital	Washington, D. C	do					2			1						4										
Providence Hospital	do	do																								
Cincinnati Hospital	Cincinnati, Ohio	do					14	2	5	15	18	6		14									342	246		
Saint Luke's Hospital	Detroit, Mich	do																								
Naval Hospital	Brooklyn, N. Y	do					2	4		3																
Do	Mare Island, Cal	do																								
Hospital for Insane	Middletown, Conn	Insane																					18	5		
Willard Asylum	Willard, N. Y	do																					26			
State Hospital for Insane	Danville, Pa	do																					9	5		
State Lunatic Asylum	Austin, Tex	do																					12	9		
Michigan Asylum	Kalamazoo, Mich	do																					12	5		
Insane Asylum of California	Stockton, Cal	do																					14	7		

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NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

NOTICE.—In filling the reports on the postal card cities and hospitals, the figures are frequently so pl between the lines as to leave the disease intended enti uncertain, except in cases where the judgment of the c piler may enable him to determine which is meant. T may be avoided by a stroke of the pen after the disease be recorded. The *total* numbers should be placed in th proper columns, and no figures placed immediately af the word *total* will be noted in the tables. Those who port *still-births* will please note them separately, as they a not included in the tables of mortality in the BULLETI

NOTICE.—All official communications to the Nation Board of Health should be addressed to the *Secretary* o the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are re minded that much inconvenience is caused by writing o both sides of the paper.

NATIONAL BOARD OF HEALTH rooms are at 1439 G street, northwest.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, APRIL 2, 1881. [No. 40.

SANITARY COUNCIL OF THE MISSISSIPPI VALLEY.

The third annual meeting of the Sanitary Council of the Mississippi Valley will be held at Evansville, Ind., on April 20. Important business will be transacted. The status of quarantine will be discussed, and report made of a schedule of articles and the circumstances under which they can be transported without conveying infections or contagions from one point to another. All State or local boards of health and sanitary organizations in the Valley of the Mississippi are invited to be represented; also, representatives of the railway and steamboat interests, especially of the Lower Mississippi.

SMALL-POX AND PLAGUE IN THE EAST.

CONSTANTINOPLE.—Under date of March 7, United States Consul G. H. Heap sends the following report of epidemic diseases in that city and in Persia:

An epidemic of small-pox has prevailed in Constantinople and the neighboring towns for some time past. Its principal ravages have been among the refugees from other provinces, vaccination being scarcely known to them; but the government has lately taken measures in its usual feeble way to cause them to submit, which they do very unwillingly, to this precaution. It is believed that the disease is now on the decline. A report from Dr. Matteosian, the delegate of the United States to the International Sanitary Council, dated the 3d instant, copy of which is inclosed, gives the mortality from this cause to the 25th of February last.

A more serious epidemic has made its appearance in the towns of Djaara and Nedjef, in the Bagdad district, as will be seen by the letter of Dr. Matteosian, dated the 5th instant, copy inclosed. It would appear that there were thirty deaths from the plague at Djaara in thirteen days, from the 3d to the 15th of February, and eighteen at Nedjef in three days. I do not know the population of these places, but that of Djaara is inconsiderable.

Dr. Matteosian states that precautions have been taken to localize the epidemic. Whether these measures will be effectual remains to be seen. The virulence of this dreaded disease, and the panic it causes, will make it difficult to prevent its spread.

Dejaara is a small place near Bagdad. Nedjef, or rather Meshed-Ali, "Shrine of Ali," where Ali, the principle disciple of Mahomet, was buried, is a place of pilgrimage of equal sanctity almost as Mecca to the Persians. The population varies considerably, according to the afflux of pilgrims at certain seasons, and it has seen several outbreaks of plague in recent years.

An epidemic of this character reaching Constantinople, crowded as it is with refugees in every stage of misery, will make great ravages.

The pilgrimage to Mecca has been accomplished this year with an unusual absence of mortality or disease, considering the great number of pilgrims from every part of the Mahometan world. Strict sanitary measures were taken to prevent the recurrence of cholera and other epidemics. Aqueducts which had fallen into disrepair were restored, and severe rules were adopted in regard to the slaughter of sheep, ten thousand of which are sometimes required for the daily supply of the multitude.

With the letter are forwarded the following reports from Dr. H. B. Matteosian, delegate of the United States to the International Sanitary Council, which acts as a general board of health:

PERA, *March* 3, 1881.

I have the honor to communicate the following communications in regard to the epidemic of small-pox, which has prevailed in Constantinople lately, and of which I have already informed your excellency.

The epidemic commenced about the beginning of the present year. It has prevailed chiefly in Pera and in the quarter extending from Top-hané, Galata, to Azab-Kapon, though many parts of the city and its environs have not been free from isolated cases. There have not been any cases in the numerous military hospitals, but more or less cases were admitted into the greater part of the civil hospitals.

It has been impossible to ascertain the total number of cases, but the total number of deaths in hospitals and in the city put together, from 13th of January to 25th of February, 1881, has been 86, according to the number of burial permits. Apparently, there is a decline in the epidemic, for no cases have been reported during the last week.

While the epidemic was at its height, by the decision of the International Sanitary Council, notice was given in the bills of health in regard to the existence of the epidemic in Constantinople. Now, according to the decision of the same council, the fact of its decline is notified.

PERA, *March* 5, 1881.

I have the honor to inform you that I have this evening received the copy of a telegram sent by Dr. Zitterer, the inspector of Bagdad, who was charged to inspect and ascertain the nature of the disease which was reported to prevail in the village of Djaara, and supposed to be the plague.

He made the necessary inspections and ascertained that it was really the plague. From the 3d to the 15th of February there have been 30 deaths in the same village
Nedjef, which is not very distar
three days.
He has placed the localities v
tine, and has taken measures t

A consular communication of [illegible], incloses a letter from Dr. Matteosian dated March 8, stating that a special meeting of the International Sanitary Council had been called March 7 to consider the outbreak of plague in the province of Bagdad. Telegrams were presented from Dr. Zitterer, sanitary inspector of Bagdad, of the following dates and purport:

March 2. On February 24, visited the places reported as infected. Cases examined at Nedjef proved to be true plague (*peste bubonique*); the disease appeared first near Djaara among the nomadic Bedouins, and from February 3 to 15 caused 30 deaths in that vicinity. In three days it reached Nedjef, and 18 persons have died there. On account of the frequent communication between the infected places and Karbella an inspector has been sent to the latter place. A strict *cordon* has been established around all infected towns, and a quarantine of 15 days imposed upon all vessels passing from them on the Euphrates; the same has been ordered to be done at the frontier stations.

March 3. Pilgrims from Nedjef to Karbella have been stopped. The guards are insufficient to maintain quarantine, and the government is called on for immediate aid in soldiers and in tents
vision for those detained in quaranti
In compliance with the recommen
minister, M. Bartoletti, issued an or
proper authorities to give all the ai
tary measures of the council.

SAINT MARY'S, GEORGIA.—Dr. A. [illegible] Barnard repo
of March 18, for the three months ending at that time, January 30, the English bark *Madras* arrived from Saint Thomas, having lost one seamen on the voyage, who was said by the officers to have died from intemperance. Small-pox prevailing in the hospital at the port of departure, the bark was detained for fumigation, although no sickness was found on board.

NOTE.—In printing the diagram on page 767, Bulletin No. 38, the number 10 was omitted at the end of the base line. The dark columns show the excess of the death-rates over 10, which is taken as a basis.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 19, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	9	13.9			9						4								1	
Bangor, Me	16,857	6	18.5			6						2									
Concord, N. H	13,838	3	11.3			3						1									
Burlington, Vt	11,364	3	13.8			3															
Boston, Mass	362,535	166	23.9	356,535	6,000	164	2	24.3	17.4			70	1			9				34	1
Cambridge, Mass	52,740	23	22.6			23						8								4	
Edgartown, Mass	1,301	1	40.1			1														1	
New Bedford, Mass	26,875	10	19.4			8	2					2									
Newburyport, Mass	13,537	3	11.6			3										1					
Marblehead, Mass	7,467	2	14.0			2						1									
Nantucket, Mass	3,726	1	13.8			1															
Plymouth, Mass	7,094	2	14.7			2															
Fall River, Mass	49,006	21	22.4			21						6								5	
Lowell, Mass	59,485	24	21.0			24						9								5	
Lawrence, Mass	39,178	13	17.3			13						2								1	
Pittsfield, Mass	13,367	3	11.7			3														2	
Worcester, Mass	58,295	20	17.9									7				2				2	
Lynn, Mass	38,284	15	20.4									5						1		4	
Brockton, Mass	13,608	4	15.3			4														2	
Holyoke, Mass	21,851	4	9.6			4						2								2	
Bridgewater, Mass	3,620	3	43.3			3															
Chicopee, Mass	11,325	4	18.4			4						2								1	
Fitchburgh, Mass	12,405	2	8.4			2															
Somerville, Mass	24,985	9	18.8			9						5								1	
Springfield, Mass	33,340	14	21.9			14						3								1	
Spencer, Mass	7,466																				
Quincy, Mass	10,529	7	34.7			7						6						1		1	
Northampton, Mass	12,172	5	21.6			5										1		1			
North Adams, Mass	10,192	2	10.3			2						1									
Haverhill, Mass	18,475	5	14.1			5						2				1				1	
Gloucester, Mass	19,329	4	11.0			4						1								1	
Chelsea, Mass	21,785	8	19.0			8						2								1	
Clinton, Mass	8,030	3	19.6																		
[illegible]	8,445	3	18.9			3						1									
[illegible] Mass	11,109	3	13.9			3							1								
[illegible]	12,017	3	13.0			3						2									
[illegible]	27,500	8	15.1			8						1									
[illegible]	21,200	8	19.4			8						2				1					
[illegible] ass	5,217	2	20.0			2						1									
[illegible] s	10,982	3	14.3			3						2								1	
[illegible] ass	10,571	2	9.9			2														1	
Waltham, Mass	11,711	3	13.3			3														1	
Webster, Mass	5,696	2	18.3			2						2									
Westfield, Mass	7,700																				
Brookline, Mass	8,200	2	12.6			2															
Newton, Mass	17,000	6	18.2			6						3						1		2	
Providence, R. I	104,850	37	18.4	100,862	3,800	35	2	18.1	27.5			8				1	1			10	
New Haven, Conn	62,882	39	32.4			37	2					12								5	3
New Britain, Conn	13,978	5	18.7			5						1									
Waterbury, Conn	20,269	7	18.0			7						3								1	
Fairfield, Conn	3,478																				
Norwich, Conn	21,150	7	17.0			7						1								2	
New York, N. Y	1,206,577	674	29.1	1,186,144	20,433	661	13	29.0	33.2			273				21		15		100	
Brooklyn, N. Y	566,689	218	20.1			213	5					87	3			7	1	2		29	
Yonkers, N. Y	18,892	10	27.6			10						2				2		1		3	
Poughkeepsie, N. Y	20,207	9	23.2			9						2				1				2	
Newburgh, N. Y	18,050	10	28.9			10						2						1		1	
Buffalo, N. Y	155,137	48	16.1			48						22				3				4	
Watertown, N. Y	10,697	1				1														1	
Binghamton, N. Y	17,315	9	27.1			9						4				1		1			
Cambridge, N. Y	1,850																				
Seneca Falls, N. Y	6,000	7	60.8			7						2								1	
Utica, N. Y	33,913	7	10.8			7						1								3	
Little Falls, N. Y	6,940	4	29.4			4						1									
Hudson County, N. J	187,950	96	26.6									37				3		2		14	
Newark, N. J	136,400	66	25.2			63	3					29				3				6	
Orange, N. J	13,206	4	15.8			4						2								2	
Plainfield, N. J	8,126	1	6.5			1						1									
[illegible] N. J	41,658	17	21.3			16	1					6								3	1
[illegible] ark, N. J	1,640																				
[illegible] hia, Pa	846,980	388	23.9	815,182	31,798	351	37	22.5	60.7			138				6		2	1	41	9
[illegible] gh, Pa	156,381	76	25.4	152,290	4,091	74	2	25.3	26.1			31	1			2	1			11	1
Erie, Pa	27,730	15	28.2			15						5				1		2		2	
Reading, Pa	43,280	16	19.3			16						7								1	
Wilmington, Del	42,499	24	29.4			19	5					5	2			1		1		2	1
District of Columbia	180,000	80	23.1	120,000	60,000	42	38	18.2	32.9			8	21			4	2			7	13
Norfolk, Va	21,966	15	35.6	11,933	10,033	7	8					2	4							1	2
Richmond, Va	63,803	38	31.1			20	18					6	5							4	3
Lynchburg, Va	15,959	11	35.9			2	9					1	3								3
Wilmington, N. C	17,361	2	6.0				2						1								1
Charleston, S. C	50,000	33	34.4	22,713	27,277	15	18	35.0	34.2			1	8			1				2	2
Augusta, Ga	23,023	7	15.9	16,189	10,835	5	2	16.2	9.4												1
Atlanta, Ga	37,421	6	9.3	21,086	16,335	1	5	3.5	16.1			1	3								1
Savannah, Ga	30,681	24	40.8	15,007	15,674	5	19	17.4	61.0				7							2	5
Rome, Ga	5,000	1	10.4				1						1								
Brunswick, Ga	2,900	2	36.0	1,500	1,400	1	1	34.8	37.3												
Jacksonville, Fla	8,000	4	26.1	5,000	3,000	3	1	31.3	17.2											1	
Key West, Fla	12,000	3	13.0	8,000	4,000	3		19.6				1								2	
Mobile, Ala	31,205	12	20.1	16,937	14,368	3	9	9.2	32.7				2								3
Selma, Ala	7,505	2	13.9	3,425	4,080	1	1	15.2	12.8												1
Columbus, Miss	5,203	2	19.9	2,633	2,570		2		40.7				1								
Natchez, Miss	7,000	2	14.7				2						1								1
Vicksburg, Miss	11,814	9	39.4			2	7					2	3			1					
[illegible] Orleans, La	216,140	121	39.2	159,128	57,231	80	41	26.2	37.4			25	14			5		1	1	9	7
[illegible] sport, La	8,033	7	33.2	3,916	4,117	4	3	53.3	38.3			1	2				1			1	
[illegible] n City, La	2,018	1	25.2																		1

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 19, 1881.

Cities and States.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		Fevers. Typhoid.		Malarial.		Scarlet.		Acute lung diseases. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me.	1														1								3								
Bangor, Me.																															
Concord, N. H.															1																
Burlington, Vt.															1																
Boston, Mass.	2		2		10		1		1				1		12				8						1						
Cambridge, Mass.	1		1		4		1										2												1		
Edgartown, Mass.																															
New Bedford, Mass.																	1		1						1						
Newburyport, Mass.															1																
Marblehead, Mass.					1																										
Nantucket, Mass.																															
Plymouth, Mass.							*																								
Fall River, Mass.															1		2		2						1						
Lowell, Mass.			1						4						2				1						1						
Lawrence, Mass.							1		5						2																
Pittsfield, Mass.																							1								
Worcester, Mass.													3		3				1												
Lynn, Mass.	1				3																										
Brockton, Mass			1																												
Holyoke, Mass.																															
Bridgewater, Mass.															1		1														
Chicopee, Mass.															3																
Fitchburgh, Mass.																															
Somerville, Mass.			1		2																								1		
Springfield, Mass.	1				2																								1		
Spencer, Mass.																															
Quincy, Mass.			1														3		1												
Northampton, Mass.															1																
North Adams, Mass.																			1												
Haverhill, Mass.							1								1																
Gloucester, Mass.					2										1																
Chelsea, Mass.																															
Clinton, Mass.															1																
Westfield, Mass.									1						1		1		1												
Brookline, Mass.																															
Newton, Mass.					1										1								1								
Providence, R. I.	1				3		1																						1		
New Haven, Conn.	2		1												3				2						1						
New Britain, Conn.																	1		1						1		1				
Waterbury, Conn.															2																
Fairfield, Conn.																															
Norwich, Conn.																															
New York, N. Y.	27		10		39		5		6		8		43		92				36				5		9		12		1		
Brooklyn, N. Y.	9		4		17		1		2		4		9		21	1			11	2	1				4		1		1		
Yonkers, N. Y.																															
Poughkeepsie, N. Y.									1																		1				
Newburgh, N. Y.									1				1		2																
Buffalo, N. Y.					5				1				6		3				2						1						
Watertown, N. Y.																															
Binghamton, N. Y.													2		1								1								
Cambridge, N. Y.																															
Seneca Falls, N. Y.									1		1																				
Utica, N. Y.																			1												
Little Falls, N. Y																															
Hudson County, N. J.					5		1						2		8				2						3		1				
Newark, N. J.	1		1		2				2						5				8				1								
Orange, N. J.																															
Plainfield, N. J.																															
													2		2		1		2								1				
	6				6		2		9				7		20	2	7	1	13	1			2				35	2	4		
			1		2		1		2				10		5		3		3						2						
	1				3				1						2																
					1								2																		
													1		3					1											
District of Columbia	1	3	3								1				4	4			1	2										2	
Norfolk, Va.				1			2								1	2															
Richmond, Va.					1				1	2					4	1									1	2			1		
Lynchburg, Va.							1									2				1											
Wilmington, N. C.																															
Charleston, S. C.					1								2		1	1		1		1											
Augusta, Ga.			1						1																1						
Atlanta, Ga.															1	2															
Savannah, Ga.				1												3															
Rome, Ga.																										1					
Brunswick, Ga.																															
Jacksonville, Fla.																										1					
Key West, Fla.																															
Mobile, Ala.									1																						
Selma, Ala.											1																				
Columbus, Miss.																														1	
Natchez, Miss.																															
Vicksburg, Miss.			1												1				1												
New Orleans, La.	1		1	4	3	1					2		8		5	8			1	3			1		1						
Shreveport, La.															1	1													1		
Morgan City, La.																															

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 19, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Baton Rouge, La	7,187	7	50.8	2,954	4,233	4	3	70.6	37.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
San Antonio, Tex	20,561	6	15.4	.....	.....	5	1	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	2	.....
Waco, Tex	8,000	2	13.0	5,000	3,000	2	.....	20.9	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Marshall, Tex	5,449	2	18.4	2,763	2,686	.....	2	.....	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Little Rock, Ark	13,185	6	23.7	.....	.....	5	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1
Nashville, Tenn	43,461	25	30.1	27,833	15,648	14	11	25.6	36.3	.....	.....	5	5	.....	.....	.....	1	.....	.....	3	1
Memphis, Tenn	33,593	30	46.6	.....	.....	9	21	.....	.....	.....	.....	2	8	.....	.....	.....	1	.....	.....	1	2
Murfreesboro', Tenn	3,850	1	13.8	2,000	1,850	1	.....	.....	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisville, Ky	123,625	36	15.2	.....	.....	22	14	.....	.....	.....	.....	9	8	.....	.....	1	1	.....	.....	3	3
Bowling Green, Ky	6,000	2	17.4	4,000	2,000	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati, Ohio	255,708	96	19.6	.....	.....	90	6	.....	.....	.....	.....	34	1	.....	.....	3	.....	1	.....	13	2
Cleveland, Ohio	160,140	49	16.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....
Gallipolis, Ohio	4,500	2	23.2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dayton, Ohio	38,677	12	16.1	.....	.....	12	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	4	.....
Portsmouth, Ohio	11,314	5	23.1	.....	.....	4	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....
Indianapolis, Ind	75,074	39	27.1	.....	.....	35	4	.....	.....	.....	.....	12	.....	.....	.....	.....	.....	5	1	7	2
Richmond, Ind	12,743	7	28.7	.....	.....	7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Evansville, Ind	29,280	13	24.2	.....	.....	10	3	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	5	3	1	.....
Chicago, Ill	503,304	202	20.9	.....	.....	.....	.....	.....	.....	.....	.....	88	.....	.....	.....	5	.....	7	.....	18	.....
Peoria, Ill	29,315	11	19.6	.....	.....	10	1	.....	.....	.....	.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....
Aurora, Ill	11,825	3	13.2	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Jacksonville, Ill	10,927	5	23.9	.....	.....	4	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	1
Elgin, Ill	8,770	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moline, Ill	8,000	1	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rock Island, Ill	11,660	6	26.2	.....	.....	6	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake, Ill	18,396	13	36.8	.....	.....	13	.....	.....	.....	.....	.....	7	.....	.....	.....	1	.....	2	.....	2	.....
Milwaukee, Wis	115,578	36	16.1	.....	.....	36	.....	.....	.....	.....	.....	16	.....	.....	.....	1	.....	1	.....	2	.....
Beloit, Wis	5,180	2	20.1	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Paul, Minn	41,498	6	9.5	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
East Saginaw, Mich	19,016	7	19.2	.....	.....	7	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....
Flint, Mich	9,000	3	17.2	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1
Lansing, Mich	8,850	3	17.2	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Dubuque, Iowa	22,254	3	7.1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saint Louis, Mo	350,522	177	26.3	328,522	22,000	161	16	25.6	38.0	.....	.....	56	6	.....	.....	11	.....	13	1	17	1
Kansas City, Mo	55,813	11	10.3	.....	.....	9	2	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	2	.....	1	.....
Omaha, Nebr	30,518	6	10.3	.....	.....	5	1	.....	.....	.....	.....	2	.....	.....	.....	.....	1	1	.....	.....	.....
Lawrence, Kans	8,500	6	36.1	6,800	1,700	5	1	38.4	30.7	.....	.....	2	1	.....	.....	1	.....	1	.....	.....	.....
Boulder, Colo	3,030	1	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake City, Utah	20,768	8	20.1	.....	.....	8	.....	.....	.....	.....	.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....
amento, Cal	21,420	5	12.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
ljo, Cal	7,000	4	29.4	.....	.....	4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
Angeles, Cal	11,311	4	18.5	.....	.....	4	.....	.....	.....	.....	.....	2	.....	.....	.....	2	.....	.....	.....	1	.....
Total	7,931,727	3,484	22.8	.....	.....	.....	.....	.....	.....	.....	.....	1,161	116	.....	.....	108	10	70	8	444	74

ABSTRACTS FROM CONSULAR REPORTS.

AMOY, CHINA.—United States Consul W. E. Goldsborough, in his reports from January 8 to February 5, states that the city is in its usual filthy and unsanitary condition, but remains free from epidemic disease. The weekly mean temperature ranged from 54° January 15 to 65° February 5.

BOMBAY, BRITISH INDIA.—United States Consul B. F. Farnham, under date of February 17, forwards the annual report, for 1880–'81, of the Grant Medical College. This institution was proposed and earnestly advocated by the former governor, Sir Robert Grant, who died in 1838. It was then resolved to build and endow the college as a memorial of his efforts, and the course of instruction was begun in 1845. Hospitals were soon added, and the college was recognized by the authorities in England, many of its graduates entering the government service. The subsequent founding of the University of Bombay took from the college the right of granting diplomas, but its students are examined for degrees by the teachers of the college in conjunction with those of the university.

The native students have generally shown much aptness for their studies, and have often graduated with distinction. The teaching was at first gratuitous, but since 1872 fees have been levied, and the course of five years now costs about the same as in most European colleges. There are now flourishing medical colleges at Calcutta, Bombay, and Madras.

CAPE HAYTIEN, HAYTI.—United States Consul S. Goutier, under date of February 28, reports the arrival of the American bark *Shooting Star* from Alicante, Spain, January 3. The vessel went to Fort Liberty to collect a cargo of logwood for Havre, France. While there, the captain's wife and four seamen were taken with the (yellow?) fever; two of the sailors recovered and continued the voyage, the other patients dying of the fever. The disease was confined to the ship, no other cases being reported. Small-pox has appeared at Puerto Plata and in St. Thomas, but vessels from those places are allowed free pratique. Cape Haytien continues, however, one of the healthiest ports in the island.

DEMERARA, GUIANA.—The reports for the city of Georgetown show *204 deaths in November* and 211 in December, 1880; the births corresponding were 144 and 176. The population not having been estimated since 1871, a death-rate based upon it would have no value at present. In each month, 4 deaths from leprosy are noted. Consumption caused 67 out of the total of 415, being 16 per cent., or very little more than the usual ratio in the United States.

FOOCHOW, CHINA.—The reports of United States Consul J. C. A. Wingate, from January 21 to February 5, show no change in the condition of the city, and no epidemic disease exists. Mean temperature 55°.

HAVRE, FRANCE.—United States Consul J. A. Bridgland, in his report of February 26, refers to a recent order, issued by the minister of agriculture and commerce, restricting the importation and use of American pork on account of alleged infection with trichina. The consul states that no pork so affected has been found in his district, nor does he believe such has been found elsewhere in France. He states that our own people are in greater danger from the use of wines exported from France, which are so adulterated as to be unfit for use.

NASSAU, BAHAMAS.—United States Consul T. J. McLain, jr., reports that during the three weeks ending March 12 the town has remained perfectly healthy, and is in excellent condition as to drainage and cleanliness.

NINGPO, CHINA.—United States Consul E. C. Lord sends reports from January 29 to February 12. Typhoid and scarlet fevers, measles, and whooping cough are said to be common among the natives, but no statistics are kept. Small-pox is now increasing, owing to the custom of inoculating children at this season. Mean temperature 49°.

SANTIAGO DE CUBA.—United States Consul J. C. Landreau, in his report for the month of February, notes yellow fever 12 cases and 9 deaths; small-pox, 10 cases and 6 deaths; and typhoid fever, 11 cases and 6 deaths. Total deaths, 103; population, 40,000; annual death-rate, 33.5 per 1,000. The yellow fever was mostly among the Spanish troops. The port remains healthy, and clean bills are still issued to vessels bound to United States ports.

SINGAPORE.—United States Consul A. G. Studer reports his district free from epidemic or contagious diseases up to February 7.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 19, 1881—Continued.

Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Cities and States.
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	Baton Rouge, La.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	San Antonio, Tex.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Waco, Tex.
....	....	....	....	1	....	1	....	....	....	....	....	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Marshall, Tex.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Little Rock, Ark.
....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	3	....	1	....	....	....	....	2	....	....	....	....	....	....	....	Nashville, Tenn.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	5	....	1	....	....	....	....	....	....	1	....	....	....	....	....	Memphis, Tenn.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	Murfreesboro', Tenn.
....	....	....	....	....	....	....	....	1	....	1	....	....	....	4	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	Louisville, Ky.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Bowling Green, Ky.
1	....	1	....	4	....	2	....	1	....	....	....	2	....	13	1	3	....	3	....	....	....	....	....	2	....	....	....	1	....	Cincinnati, Ohio.
....	....	2	....	1	....	....	....	....	....	....	....	....	....	....	....	3	....	3	....	....	....	....	....	....	....	....	....	....	....	Cleveland, Ohio.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Gallipolis, Ohio.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	Dayton, Ohio.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	Portsmouth, Ohio.
....	....	....	....	1	....	2	....	1	....	1	....	....	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	1	....	Indianapolis, Ind.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	Richmond, Ind.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	Evansville, Ind.
4	....	2	....	11	....	1	....	3	....	2	....	1	....	15	....	5	....	10	....	....	....	1	....	2	....	12	....	1	....	Chicago, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	3	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	Peoria, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	Aurora, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	Jacksonville, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Elgin, Ill.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Moline, Ill.
....	....	....	....	....	....	....	....	3	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Rock Island, Ill.
....	....	....	....	1	....	....	....	....	....	....	....	1	....	3	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	Lake, Ill.
1	....	1	....	....	....	....	....	1	....	....	....	2	....	3	....	1	....	2	....	....	....	....	....	....	....	....	....	....	....	Milwaukee, Wis.
....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Beloit, Wis.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Saint Paul, Minn.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	East Saginaw, Mich.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	[illegible]ich.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	[illegible]ich.
....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	[illegible]va.
3	....	2	....	1	....	1	....	3	....	7	1	3	....	17	1	4	....	3	....	....	....	1	....	2	....	....	....	1	....	
....	....	....	....	....	....	1	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
65	3	40	6	137	2	27	1	54	3	29	1	48	...	290	34	43	5	125	12	1	...	22	1	40	2	64	2	18	3	

SWATOW, CHINA.—This city, in the consular district of United States Consul J. C. A. Wingate, is reported under date of January 22 to be in the usual unclean condition, excepting the foreign settlement. No epidemic disease has existed of late.

TUNIS, AFRICA.—Under date of March 2 United States Consul George W. Fish gives the following account of the city and regency of Tunis:

The year 1880 has been marked by agricultural and financial prosperity. Although the summer heats were protracted and severe, the country was exempt from epidemic and endemic diseases; there have been no alarms on account of contagious diseases, nor has any unusual sickness prevailed. During the extreme heat of summer there is generally very little sickness, and but few deaths occur. Sunstroke is seldom heard of in this country, and never among the native population. The autumn rains bring an increase of sickness and mortality. Lung diseases are apt to assume the *typhoid* form, and diphtheria is observed among the children, while fevers of typhoid type prevail. The city has an estimated population of about 150,000, of whom 30,000 are Jews, about 20,000 Christians, and the remainder Mohammedans, divided between Moors, Arabs, and Negroes, in unknown proportion. No reports of mortality can be obtained from the native authorities, but through the courtesy of the Roman and Protestant clergy a record of interments has been obtained. This shows a total of 263 deaths among the Christian population, giving an annual death-rate of 13.1 per 1,000. This rate may probably be taken as a fair average for the whole population, being somewhat higher among the Jews and lower among the Mohammedans. The climate is remarkably equable during the winter; the temperature for January and February of 1881 varied only between 57 and 60 degrees.

VALPARAISO, CHILI.—United States Consul L. H. Foote sends a report for the month of December, giving a total of 509 deaths, in a population of 101,088; annual death-rate, 59.2 per 1,000. There were 61 deaths from consumption, 148 from other lung diseases, and 179 from fevers.

For the month of January, 524 deaths are reported, giving an annual mortality of 61 per 1,000. Small-pox has again appeared and caused 35 deaths, consumption 44, other lung diseases 82, and fevers 167.

The following reports for the week ending [illegible] are from places in which burial permits are no[illegible]

Allegheny, Pa., 78,000; deaths, 29; accident 1, consum[illegible] diphtheria 3, typhoid fever 1, scarlet fever 7, pneumonia 2. [illegible] Me., 8,000; deaths, 2; consumption 1. Belfast, Me., 5,308; death[illegible] Brattleborough, Vt., 6,000; death, 1; consumption 1. Bucyrus, Ohio, 3,950; deaths, 3. Calais, Me., 6,162; no deaths. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 5,996; death, 1; consumption 1. Clinton, Mich., 1,200; death, 1; under 5 years 1. Columbus, Ga., 10,000; deaths, 2; under 5 years 1, croup 1, diarrhœa 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Decatur, Miss., 1,000; no deaths. Gunn City, Mo., 125; death, 1; under 5 years 1, measles 1. Hernando, Miss., 1,000; deaths, 2; consumption 1, puerperal diseases 1. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; no deaths. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,251; deaths, 2; pneumonia 2. Kenosha, Wis., 5,500; death, 1. Louisiana, Mo., 5,000; deaths, 2; under 5 years 2, pneumonia 1, whooping cough 1. Madison, Ind., 9,009; deaths, 4; under 5 years 1. Martinsburg, W. Va., 6,334; deaths, 3; under 5 years 2, accident 1, typhoid fever 1. Meridian, Miss., 4,013; deaths, 2; consumption 1, pneumonia 1. Milan, Tenn., 1,800; deaths, 2; consumption 1, pneumonia 1. Milledgeville, Ga., 3,000; deaths, 2; puerperal 1. Mount Pleasant, Iowa, 4,500; no deaths. Muscatine, Iowa, 8,412; deaths, 2; consumption 1, malarial fever 1. Niles, Mich., 4,200; no deaths. Painesville, Ohio, 5,504; deaths, 2; under 5 years 1, pleurisy 1. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; death, 1; measles 1. Port Royal, S. C., 750; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, 5,000; deaths, 2; under 5 years 1, diphtheria 1. Springfield, Ohio, 21,000; deaths, 8; under 5 years 3, cerebro spinal meningitis 1, consumption 1, pneumonia 2. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; death, 1; under 5 years 1. Titusville, Pa., 9,046; death, 1; consumption 1. Tuskaloosa, Ala., 2,000; no deaths. Verona, Miss., 1,000; no deaths. Winchester, Va., 5,000; deaths, 2; under 5 years 1, congestion of the lungs 1. Winona, Minn., 10,000; death, 1; under 5 years 1, diphtheria 1. Youngstown, Ohio, 15,421; deaths, 6; under 5 years 3, diarrhœa 1, typhoid fever 2, pneumonia 2, bronchitis 1. Total population, 275,463; deaths under 5 years, 19; total number of deaths, 87; annual rate per 1,000, 16.4.

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 *PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FOUR WEEKS ENDING FEBRUARY* 5, 12, 19, *AND* 26, 1881, *FROM THE FOLLOWING PLACES.*

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Total death-rate.	Death-rate under 5 years.
Portland, Me	16.5	1.0
Concord, N. H	22.6	3.8
Burlington, Vt	6.9	2.3
Boston, Mass	26.9	10.3
Cambridge, Mass	20.1	8.6
Edgartown, Mass	30.0	.....
New Bedford, Mass	19.4	2.0
Newburyport, Mass	24.9	3.8
Marblehead, Mass	22.7	5.2
Plymouth, Mass	14.7	3.6
Fall River, Mass	23.1	8.5
Lowell, Mass	22.3	6.7
Lawrence, Mass	21.3	8.3
Worcester, Mass	18.8	5.4
Lynn, Mass	17.7	7.5
Holyoke, Mass	19.8	4.2
Bridgewater, Mass	7.2	.....
Chicopee, Mass	16.1	3.4
Fitchburg, Mass	11.5	3.1
Somerville, Mass	19.3	6.2
Springfield, Mass	19.9	7.4
Spencer, Mass	20.8	10.5
Quincy, Mass	13.8	5.0
Northampton, Mass	18.3	4.3
North Adams, Mass	21.8	3.8
Haverhill, Mass	16.9	6.3
Gloucester, Mass	20.4	11.5
Chelsea, Mass	23.9	6.6
Clinton, Mass	7.0	1.2
Beverly, Mass	16.5	1.5
Attleboro', Mass	15.1	4.0
Malden, Mass	18.5	5.4
Salem, Mass	19.7	4.7
Westboro', Mass	22.5	5.0
Woburn, Mass	15.5	3.7
Taunton, Mass	19.3	3.7
Weymouth, Mass	23.0	1.2
Waltham, Mass	17.6	4.4
Webster, Mass	15.7	4.5
Providence, R. I	20.3	6.3
New Haven, Conn	19.3	4.8
New Britain, Conn	16.8	7.4
Waterbury, Conn	12.8	3.2
Fairfield, Conn	15.0	3.7
New York, N. Y	30.3	12.4
Brooklyn, N. Y	24.1	9.7
Yonkers, N. Y	11.7	1.4
Poughkeepsie, N. Y	23.2	5.1
Newburgh, N. Y	17.3	1.4
Utica, N. Y	11.1	3.4
Buffalo, N. Y	18.3	6.4
Cambridge, N. Y	.....	7.3
Seneca Falls, N. Y	17.4	.....
Hudson County, N. J	24.3	9.6
Camden, N. J	18.4	6.2
Orange, N. J	11.8	3.9
Plainfield, N. J	16.3	8.1
Philadelphia, Pa	24.5	7.8
Pittsburgh, Pa	22.0	3.5
Erie, Pa	15.0	4.7
Reading, Pa	21.0	9.9
Wilmington, Del	27.0	9.5
District of Columbia	25.8	9.2
Norfolk, Va	32.0	16.0
Lynchburg, Va	33.5	8.1
Charleston, S. C	33.8	7.8
Savannah, Ga	32.7	11.5
Augusta, Ga	27.7	10.1
Atlanta, Ga	19.5	5.5
Rome, Ga	18.2	.....
Brunswick, Ga	36.0	18.0
Jacksonville, Fla	34.2	3.2
Mobile, Ala	22.5	5.4
Selma, Ala	17.4	3.2
Vicksburg, Miss	26.5	6.6
Columbus, Miss	12.5	10.0
New Orleans, La	28.5	8.1
Baton Rouge, La	16.3	5.4
Shreveport, La	18.9	5.9
San Antonio, Tex	19.4	7.0
Brownsville, Tex	80.9	47.2
Waco, Tex	17.9	4.9
Little Rock, Ark	24.7	11.9
Nashville, Tenn	20.4	7.5
Memphis, Tenn	43.8	12.8
Clarksville, Tenn	10.9	3.6
Murfreesboro', Tenn	20.7	13.8
Louisville, Ky	19.8	7.3
Bowling Green, Ky	10.9	4.2
Cincinnati, Ohio	21.3	8.1
Dayton, Ohio	20.1	6.7
Gallipolis, Ohio	11.6	.....
Portsmouth, Ohio	16.1	4.6
Indianapolis, Ind	24.3	4.8
Evansville, Ind	21.8	6.9
Richmond, Ind	15.3	3.0
Chicago, Ill	22.1	10.0
Aurora, Ill	8.8	2.2
Elgin, Ill	16.4	4.4
Jacksonville, Ill	14.3	2.4
Moline, Ill	19.5	9.8
Rock Island, Ill	26.1	8.7
Milwaukee, Wis	21.1	9.5
Flint, Mich	14.5	4.3
Saint Louis, Mo	20.1	7.4
Omaha, Nebr	10.7	6.4
Boulder, Colo	4.3	.....
San Francisco, Cal	17.9	4.8
Vallejo, Cal	9.2	1.8

DIAGRAM REPRESENTING THE SAME FOR THE MONTH OF FEBRUARY, 1881, FROM THE FOLLOWING PLACES.

[The black lines represent mortality over 5 years; the white lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

Places.	Total death-rate.	Death-rate under 5 years.
New London, Conn	11.1	.....
Amsterdam, N. Y	27.8	16.6
Elmira, N. Y	23.7	7.1
Kingston, N. Y	6.8	2.7
Paterson, N. J	24.8	10.0
Scranton, Pa	20.4	6.6
Newcastle, Pa	38.1	6.3
Petersburg, Va	29.5	11.0
Humboldt, Tenn	13.0	.....
Wheeling, W. Va	15.3	4.5
Detroit, Mich	21.4	9.2
Lansing, Mich	12.5	.....
Lake, Ill	21.5	12.2
Saint Paul, Minn	19.3	9.8

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	Mar. 5	3	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
Do	do	4,500	Mar. 12	2	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada	Montreal	135,000	Feb. 26	69	26.7	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	4	14.6
Do	do	135,000	Mar. 5	75	29.0	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	8	27.5
Do	do	135,000	Mar. 12	72	27.8	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	10	30.3
Bermuda	Hamilton	14,867	Mar. 8	4	14.0	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	58.7
Do	do	14,867	Mar. 15	3	10.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.4
Cuba	Havana	195,437	Mar. 12	175	46.7	.....	.....	.....	1	.....	18	.....	2	.....	.....	.....	.....	74
Hayti	San Domingo	8,000	Jan. 30	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	do	8,000	Feb. 6	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
Do	do	8,000	Feb. 13	3	19.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
Do	do	8,000	Feb. 20	8	52.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	do	8,000	Feb. 27	10	65.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Do	do	8,000	Mar. 6	9	58.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	Cape Haytien	10,000	Feb. 5	6	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	10,000	Feb. 12	7	48.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	10,000	Feb. 19	6	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	10,000	Feb. 26	2	13.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	10,000	Mar. 5	8	55.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	Port au Prince	30,000	Mar. 2	13	22.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	30,000	Mar. 9	14	24.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	Aux Cayes	9,000	Feb. 26	7	40.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	9,000	Mar. 5	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
West Indies	Turk's and Caicos Is'd.	3,500	Feb. 5	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	3,500	Feb. 12	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	3,500	Feb. 19	1	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	3,500	Feb. 26	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	3,500	Mar. 5	2	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	Curaçao City	12,025	Feb. 19	4	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Do	do	12,025	Feb. 26	12	52.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Aspinwall	Colon	3,000	Mar. 12	2	41.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Mexico	Vera Cruz	20,000	Mar. 6	24	63.4	.....	.....	.....	3	.....	7	.....	.....	.....	.....	.....	.....	77
Do	Matamoras	16,000	Mar. 12	14	45.7	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	
Do	Acapulco	3,500	Feb. 13	8	119.3	.....	.....	.....	.....	6	1	.....	.....	.....	.....	.....	.....	83
Do	do	3,500	Feb. 20	9	134.2	.....	.....	.....	.....	15	5	.....	.....	.....	.....	.....	.....	85
Do	do	3,500	Feb. 26	8	119.3	.....	.....	.....	.....	14	4	.....	.....	.....	.....	.....	.....	84
Do	do	3,500	Mar. 6	12	178.9	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	.....	.....	85
Brazil	Rio de Janeiro	330,000	Feb. 19	215	34.0	.....	.....	.....	10	.....	.....	.....	4	.....	.....	.....	14	.....
St. Helena	Jamestown	6,241	Feb. 5	1	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.3
Do	do	6,241	Feb. 12	3	25.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82.3
Ireland	Queenstown	10,000	Mar. 12	5	25.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Mar. 5	95	28.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	.....
Do	Dublin	333,401	Mar. 5	230	35.2	.....	.....	.....	.....	.....	.....	.....	3	.....	5	.....	14	.....
Scotland	Leith	59,958	Mar. 5	24	25.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	30.6
Do	Dundee	155,100	Mar. 5	80	29.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32.1
England	London	3,707,130	Mar. 5	1,633	23.0	.....	.....	.....	.....	.....	52	.....	8	.....	.....	.....	79	37.1
Do	Sheffield	304,938	Feb. 26	100	17.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33.2
Do	do	304,938	Mar. 5	132	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31.4
Do	Bradford	197,196	Mar. 5	95	24.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Do	Liverpool	549,834	Mar. 5	279	26.5	.....	.....	.....	.....	.....	.....	4	1	16	.....	32	12	35.4
Do	Tunstall	27,775	Mar. 14	11	20.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	50
Do	Bristol and Clifton	213,500	Mar. 5	98	23.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	6	38.2
Wales	Cardiff	83,289	Mar. 12	36	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	47.4
France	Lyons	342,815	Feb. 12	189	28.8	.....	.....	.....	.....	.....	15	.....	3	.....	.....	.....	2	.....
Do	do	342,815	Feb. 19	178	27.0	.....	.....	.....	.....	.....	12	.....	1	.....	.....	.....	5	.....
Do	do	342,815	Feb. 26	170	25.9	.....	.....	.....	.....	.....	9	.....	3	.....	.....	.....	9	.....
Do	Paris	1,988,806	Mar. 10	1,287	23.1	.....	.....	.....	.....	.....	22	.....	52	.....	.....	.....	124	.....
Do	Rouen	104,209	Mar. 12	49	24.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Zurich	25,329	Mar. 5	6	12.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Holland	Rotterdam	148,102	Mar. 5	96	32.4	.....	.....	.....	.....	.....	.....	1	1	.....	.....	10	1	.....
Do	Amsterdam	316,952	Feb. 26	188	30.9	.....	.....	.....	.....	.....	.....	.....	4	.....	1	.....	5	.....
Do	do	316,952	Mar. 5	177	29.1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	6	.....
Germany	Berlin	1,123,571	Feb. 26	516	26.8	.....	.....	.....	.....	3	.....	8	5	3	.....	122	57	33
Do	Bremen	112,200	Feb. 19	58	27.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Do	do	112,200	Feb. 26	36	16.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Barmen	95,000	Feb. 26	37	22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	33
Do	Brunswick	74,000	Mar. 5	41	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	28.9
Do	Breslau	273,000	Feb. 26	171	32.7	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	14	33
Do	Hamburg	400,000	Feb. 13	184	24.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....
Do	Cologne	144,751	Feb. 26	72	25.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	14	.....
Do	Frankfort	137,000	Feb. 26	55	21.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
Do	do	137,000	Mar. 5	46	17.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.2
Do	Mannheim	50,500	Mar. 12	23	23.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50.9

MORTALITY IN FOREIGN CITIES, &c.—Continued.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Belgium	Brussels	406,638	Feb. 26	191	24.4						1		3				5	
Do	do	406,638	Mar. 5	190	24.3						1		1				9	
Do	Antwerp	173,643	Feb. 26	92	27.6					14	2	15	1					
Do	do	173,643	Mar. 5	93	27.9					17	4	15	2					
Saxony	Leipsic	151,616	Mar. 5	56	19.2													35.4
Do	Chemnitz	95,135	Feb. 26	62	34.0								1				2	32
Do	Dresden	220,216	Feb. 26	112	24.6											16	16	33.8
Bavaria	Nuremberg	99,519	Feb. 26	73	38.3								1				13	35.6
Do	Munich	230,000	Feb. 26	164	37.2						1		1				19	
Do	do	230,000	Mar. 5	147	33.3								2				15	
Denmark	Copenhagen	235,254	Feb. 22	122	27.1							2					18	32.8
Italy	Rome	305,469	Feb. 5	169	28.8						15		3				8	49
Do	do	305,469	Feb. 12	162	27.7						9		2				8	47.4
Do	do	305,469	Feb. 19	193	33.0						7		6				16	45.8
Do	Genoa	185,000	Mar. 5	99	27.9													53.6
Austria	Vienna	731,191	Feb. 26	426	26.7						20		4				22	34
Do	Trieste	128,195	Feb. 19	106	43.1						1							
Roumania	Bucharest	177,646	Feb. 26	107	31.4								6				9	
Do	do	177,646	Mar. 5	128	37.6						1		3				12	
Russian Poland	Warsaw	357,169	Feb. 19	164	24.0						1							
Do	do	357,169	Feb. 26	174	25.5													16.2
Sweden	Stockholm	169,429	Feb. 19	92	28.7								1				13	20.5
Norway	Christiania	120,000	Feb. 26	38	16.5							2				8	2	43
Spain	Malaga	115,882	Mar. 6	67	30.2						3		1				7	62.5
Do	do	115,882	Feb. 27	68	30.6						3							65
Do	Seville	138,000	Feb. 13	68	25.7										1		4	59
Do	do	138,000	Feb. 20	82	36.9										4		18	55.4
Do	do	138,000	Feb. 28	76	34.2								1				15	62.6
Do	Cadiz	65,028	Feb. 19	36	28.9													59.5
Do	do	65,028	Feb. 26	29	23.3													59.9
Barbary	Tripoli	20,000	Mar. 5	9	23.5													
Africa	Algiers	68,055	Feb. 6	39	30.6								2					65
Do	do	68,055	Feb. 13	41	31.4								1					64
Do	do	68,055	Feb. 20	56	42.8							1	1					63
Do	do	68,055	Feb. 27	70	53.4							1	1				1	64
Egypt	Alexandria	220,000	Mar. 5	132	31.2													
India	Calcutta	429,535	Feb. 12	273	33.1		8				10		13				6	66.3
Do	Bombay	644,500	Feb. 15	403	31.0													
China	Shanghai	2,197	Feb. 9	2	52.2													39.4
Japan	Kobe	19,248	Feb. 12	10	28.6													
Do	do	19,248	Feb. 19	10	28.6													

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BUCYRUS, OHIO.—Dr. W. B. Carson, under date of March 21, reports that since last December an epidemic of *influenza* has prevailed. Most of the people were affected, but few cases required medical treatment, unless bronchial or pharyngeal inflammation appeared. The duration of the attacks was usually from four to fourteen days.

CHARLESTON, S. C.—Under date of March 21, Dr. F. P. Porcher reports a form of *influenza* prevailing. The symptoms are, some fever, catarrh, almost constant cough, some pains in the limbs, but not so marked as in the dengue fever of last summer; there is usually headache, with redness of the tongue, and not unfrequently vomiting. The fever is sometimes high, but the prostration following is not very decided. The eruption of dengue is wanting, but in two cases swelling and suffusion of the face have been observed. The disease has extended to Columbia and elsewhere, and has affected a large number of persons, white and colored, throughout the lower portion of the State. Scarlet fever exists in the city at present, and very rarely a case of diphtheria is seen. The children in the public schools are being vaccinated, though there is at present no small-pox in the State.

HAVANA, CUBA.—During the week ending March 18, there were 23 deaths from small-pox. No deaths from yellow fever were reported, but a few cases of that disease are known to exist.

HUDSON, N. Y.—Dr. George P. Salmon, health officer, writes under date of March 21 that 11 cases of small-pox have occurred since January 31, in this city of about 9,000 inhabitants. Five deaths have been reported, and four cases are still under treatment, which it is hoped will recover. Scarlet fever of a mild type has also prevailed to some extent.

VERA CRUZ, MEXICO.—The official report for the month of January gives 28 deaths from yellow fever, of which 19 were in the first two weeks. Small-pox caused 9 deaths, consumption 16, other lung diseases 16, diarrhœa 5, dysentery 4, malarial fevers 2. Total number of deaths, 123; population, 20,000; annual rate, 72.3 per 1,000.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice *of at least* one week should be given when a large number *is required.*

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

National Board of Health

BULLETIN.

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E. P. FOSTER, M.D. 33 E. 20th ST. N.Y.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

HAVANA, CUBA.—During the week ending March 25, no deaths from yellow fever were reported, and only 4 cases were known to exist in the city. There were 29 deaths from small-pox, and 8 from typhoid fever during the week.

LAKE, ILL.—Dr. A. L. Cory, deputy commissioner of health, sends reports of deaths from January 1 to February 26. For the four weeks ending January 29, there were 28 deaths; consumption 2, other lung diseases 8, croup 1, diphtheria 3, scarlet fever 3, typhoid fever 1, puerperal 1, accidents 2. For the four weeks ending February 26, there were 30 deaths; consumption 1, other lung diseases 8, diphtheria 2, malarial fever 1, whooping-cough 1, puerperal 2, diseases of the brain 4, accident 1. The population being estimated at 18,200, the annual death-rate for January was 20.1, and for February 21.5 per 1,000. During the week ending January 29, a case of small-pox occurred, and another in the last week of February; both were removed to the hospital in Chicago, and died there. From March 5 to March 26, five cases were reported, of which two died in the town.

PASS CHRISTIAN, MISS.—Dr. Charles Le Roux, under date of March 1, submits the following report on this town and vicinity:

Pass Christian is situated in Harrison County, Mississippi, in latitude 30° 20′ north, 58 miles from the city of New Orleans and 83 from Mobile, on the New Orleans and Mississippi R. R.

Its altitude above sea-level ranges between 15 and 25 feet.

In the year 1800 there were here but few families, consisting of foreigners, descendants of the original French settlers in Louisiana. The town was incorporated in the year 1848 with a front on the Gulf of 4½ miles. Since that time the settlement has been extended back to an average depth of three-quarters of a mile. In 1860 the resident population was about 1,500; it is now about 2,000: two-thirds of whom are natives, one-sixth Europeans, and one-sixth negroes. But during the summer our population is increased to about 5,000

No meteorological observations were ever recorded in this city, as far as known. But it can safely be stated that during the winter the thermometer very rarely falls below 30° Fah., or rises above 75°; whilst in the summer it seldom reaches 90.

We can, therefore, boast of a climate particularly adapted to invalids who dread either extreme of temperature and of an atmosphere perfectly free from malaria. No place in the United States is better suited for a first-class sanitarium.

Pass Christian is built on a high ridge fronting the Gulf of Mexico, and within a few feet only of its waters. This ridge gradually declines towards the rear on the north and west sides, where there are marshes at an average distance of 5,000 feet. But these marshes act as drains, having high land on each side of them, and are subject, besides, to the daily overflow of the salt-water tide.

About three miles back the ground begins to be undulating. A little further it becomes hilly, and continues more and more so as one proceeds further north.

One of the nearest elevations is at a place called Bluffville, distant six miles, due north, from our town. It is about 50 feet higher than the waters of Wolf River, which it fronts.

On the other side of this river, and of other water courses, the hills rapidly increase in height for 150 miles.

The lowest point back of the town is about 20 feet lower than the highest ground in front.

During the day, and especially in the summer, we are constantly fanned by a pure and cool sea breeze; whilst during the night, the north breeze coming from the rear, where we are protected by a dense forest of fine pine timber, reaches us loaded with the aroma of turpentine.

This air, besides being perfectly free from all miasma, contributes to make of this place, perhaps, the healthiest in the United States. Northern invalids say that they prefer this climate to that of Florida, because, in the winter, it is somewhat cooler than some portions of that State, and consequently less enervating, whilst they never suffer here from extreme cold; and our atmosphere, free from malaria and rich in ozone, invigorates their enfeebled systems.

Pass Christian has no regular market garden within its corporate limits. But each residence has its own garden attached. As the land is generally poor and sandy, this is not considered a farming country. We count about 350 houses in our town, some of them lovely residences, and all well ventilated and in perfect sanitary condition. Two public schools, one for white and the other for colored children; two cemeteries, one Protestant, the other Roman Catholic. These grounds are well drained, and no sickness ever took place in the neighborhood that could be attributed to the proximity of the graves. The bodies are usually buried in the soil at a depth varying between 6 and 10 feet; some few in brick vaults, above ground and well cemented on the outside. On an average we hardly witness half a dozen deaths in the year; no burial certificate is required, we having no law to that effect. As to health laws, the registration of deaths, births, and diseases we are governed by our State laws, not always strictly complied with however; but we have no municipal laws in connection therewith. We have no board of health in our town; but there is one in the county which meets once a month between the 1st of May and the 1st of November in Mississippi City. Our county board of health is composed of five members; two regular physicians, one lawyer, and two merchants. They are elected by the county board of supervisors, and their term of service is four years. A small tax is levied on the people of the county to defray the expenses of said board of health. Within the last two years, its members have unanimously adopted the rules and regulations of the National Board of Health, and agreed to act in concert with it to the full extent of their power in all matters concerning quarantine and hygiene.

Our quarantine station is situated on Ship Island, about 24 miles (E. S. E.) from our town, and it is under the supervision of the National Board of Health. We consider ourselves sufficiently protected on that side, under the present system of quarantine, against the importation of yellow fever. Never was a case traced back to our shipping in this county. It is not probable that it could now be introduced in the face of all the precautions that are being taken.

Before a vessel enters our port it must pass by Ship Island. There it is boarded by the quarantine officer, who detains all vessels coming from infected ports to be cleansed, fumigated, disinfected, and kept under observation until it is thought safe to give "free pratique."

Pass Christian enjoyed perfect immunity from yellow fever from 1867 until 1878, and that in spite of daily constant intercourse both by land and water with the city of New Orleans.

The site of Pass Christian was originally a sandy ridge facing the waters of the gulf, and with the exception of the drainage of one low lot, the building of a shell-road in front, and draining-ditches in the rear, its natural conformation never was changed. The land drains from front to rear, little or no water reaching the gulf, excepting the natural sipage water. There are no ravines traversing the city. It is perfectly level all through and well drained for an extent of 4½ miles. There have been no water courses to fill up or to modify in any way.

There are no manufactures, although we know of no spot in the south which offers greater advantages for the canning of oysters and other shell-fish, and for cotton, wool, and glass factories.

The lowest lot is about 6 feet lower than the average level, but it is thoroughly ditched and is drained into the Gulf.

The water supply is good, and almost exclusively furnished by wells having an average depth of from 10 to 15 feet. These wells are sufficiently remote from any contaminating influence. Typhoid fever and diphtheria are both unknown here.

The privies are 5 feet or more deep, sufficiently remote from the residence and water supply, a trap-door connecting with the rear enabling one to remove or disinfect their contents. For the latter purpose lime and copperas are freely used.

The slaughter-house is situated at a distance of three-quarters of a mile in the pine woods. It is kept in a tolerably fair condition. No sickness was ever caused by it.

Each residence has its own wharf, and bath-house attached, extending out into the Gulf to a distance varying between 300 and 400 feet, where at high tide an average depth of water is reached ranging between 3 and 4 feet only, for at this point the white, sandy bottom slopes so gradually that all danger to ladies and children is avoided. The greatest depth of water in the harbor varies between 12 and 15 feet.

At a short distance north of the town and at an elevation of 150 feet above the level of the Gulf is located the largest vineyard in the South, comprising 82 acres covered with vines, and where delicious champagne, still, and claret wines are made in large quantities.

Here is located the Mississippi Military Institute, where is received a full collegiate education. There are also several schools for boys, girls, and young ladies. Another large college is now being erected by the Christian Brothers, and will be open by next November. We have three churches, one Episcopal, one Roman Catholic, and one Presbyterian, all at or near the center of the town.

Those who are in pursuit of health cannot find a more delightful climate. Northerners can come down by the middle of November and remain even up to the 1st of June without experiencing either extreme of heat or cold.

Visitors can readily rent a house for the season or a whole year, or, if preferred, obtain board in some private family at a moderate price.

PHILADELPHIA, PA.—Dr. R. A. Cleemann, health officer, sends the following report for the last three months of 1880:

The temperature, the most important climatic element in regard to the death-rate, was unfavorable in Philadelphia during the last quarter of the year 1880 for a low mortality; for the mean reading of the thermometer during that period, calculated from the monthly means as recorded at the United States signal station in this city, was only 41.4° F., or nearly three degrees below the average for the quarter during nine years (1872–1880). I assume that it has been shown that wide departures from the average of temperature in climates, either in the direction of greater cold or more excessive heat, raise the death-rate.

Each of the months in the quarter was colder than usual, but December fell most below its average, the mean temperature for the month being but 28.6° F., or about five and a half degrees below that average. The highest point reached by the mercury during the month was 52° F., and the lowest 5° F., making a thermometric range of 57° F. During four consecutive days, in the first half of the month (8th, 9th, 10th, 11th), the thermometer marked continuously below the freezing point; and also for the last three days in December, in this period the mercury never rising above 14° F.

A drought during the first two months of the quarter led to a deficiency of rainfall in the three months taken collectively, only 7.54 inches being registered for the whole quarter instead of the average 9.40 inches. The precipitation in December, however, was considerably greater than usual, as much as 4.05 inches of water being measured instead of the average 2.68 inches. This was due to a snowstorm in the latter part of the month, more severe than has been observed for many years in Philadelphia, the fall of snow on the 26th measuring, when melted, 1.49 inches. The mean relative humidity of the atmosphere during the quarter did not differ much from the average, being expressed as 69.9° saturation = 100°. December was, as usual, the most humid of the months, registering for its mean 74.3°, to 67.5° in October and 67.9° in November.

The whole number of deaths recorded during the quarter (thirteen weeks, October 3, 1880, to January 1, 1881) was 4,222, divided among the several months as follows: October (4 weeks), 1,150; November (4 weeks), 1,252; December (5 weeks), 1,820. The aggregate does not include the still-born, numbering 191, or the deaths following premature birth, which reached 64. The mortality is much greater than in the corresponding quarter of the previous year, when the record showed only 3,574 deaths in 14 weeks. With the population of Philadelphia at 846,980 inhabitants, as determined by the late United States census, it corresponds with an annual death-rate of 19.92 deaths to a thousand inhabitants living, nearly reaching the actual annual death-rate for 1880, which, calculated from the figures given in my letters to the Bulletin, was 20.54. This distribution of the deaths makes nearly 25 per cent. of the annual mortality fall to the last quarter, which is, as a rule, in Philadelphia the healthiest of the year, only about twenty-two per cent. having been the proportion during the sixteen years previous to 1877.

There were, as usual, more deaths among males than females, 2,197 of the former dying to 2,023 of the latter; and the mortality was divided among the several ages as follows: Under one year, 687; between one and two years, 202; between two and five years, 363; between five and ten years, 228; between ten and fifteen years, 89; between fifteen and twenty years, 141; between twenty and thirty years, 505; between thirty and forty years, 436; between forty and fifty years, 402; between fifty and sixty years, 356; between sixty and seventy years, 325; between seventy and eighty years, 283; between eighty and ninety years, 174; and beyond 90 years, 31. It appears that nearly thirty per cent. of the mortality fell upon children under five years of age; a large proportion, but considerably less than in the previous two quarters, when cholera infantum was slaying its hecatombs of little ones. According to the classification adopted in previous letters, the deaths were thus distributed:

I. ZYMOTIC DISEASES, 988; including *miasmatic diseases*, 950 (small-pox, 317; measles, 3; scarlatina, 98; diphtheria, 101; croup, 92; whooping-cough, 22; typhoid fever, 159; typhus fever, 7; erysipelas, 12; puerperal fever, 4; dysentery, 11; diarrhœa, 24; cholera infantum, 8; cholera morbus, 3; malarial fevers, 17; rheumatism, 17; cerebro-spinal meningitis, 22; other miasmatic diseases, 33); *enthetic diseases*, 7; *dietic diseases*, 28; *parasitic diseases*, 3.

II. CONSTITUTIONAL DISEASES, 979; including *diathetic diseases*, 155 (cancer, 91; other diathetic diseases, 64); *tubercular diseases*, 824 (tabes mesenterica, 97; phthisis pulmonum, 689; other tubercular diseases, 38).

III. LOCAL DISEASES, 1,697; including *diseases of the nervous system*, 570 (cephalitis, 197; apoplexy, 94; paralysis, 101; convulsions, 124; other diseases of the nervous system,, 54); *diseases of organs of circulation*, 253 (pericarditis, 36; aneurism, 8; heart diseases, 202; other diseases of organs of circulation, 7); *diseases of respiratory organs*, 484 (bronchitis, 116; pleurisy, 15; pneumonia, 313; other diseases of the respiratory organs, 40; *diseases of digestive organs*, 244 (enteritis, 86; peritonitis, 27; intestine diseases, 34; stomach diseases, 8; liver diseases, 68; other diseases of the digestive organs, 21); *diseases of urinary organs*, 116 (nephritis, 7; Bright's disease, 73; other diseases of urinary organs, 36); *diseases of generative organs*, 19 (diseases of ovaries, 5; uterus diseases, 14); *diseases of organs of locomotion*, 6 (caries and necrosis, 5; joint disease, 1); *diseases of the integumentary system*, 5.

IV. DEVELOPMENTAL DISEASES, 397; including *developmental diseases of children*, 32 (malformations, 31; teething, 1); *developmental diseases of adults*, 6 (puerperal convulsions, 6); *developmental diseases of old people*, 176 (old age, 176); *diseases of nutrition*, 183 (debility, 109; inanition, 74).

V. VIOLENT DEATHS, 157; including *accident or negligence*, 139 (drowning, 10; otherwise, 129); *homicide*, 3; *suicide*, 15.

CAUSES NOT SPECIFIED, 4. Total, 4,222.

Compared with the previous quarter, there was a diminution of 229 deaths. This was due to a considerable falling off in the mortality from zymotic, constitutional, and developmental diseases, and from violent deaths, for there was quite an increase in that from local diseases. The decrease is readily accounted for by the lowered temperature, which tended to exclude cholera infantum in the first class mentioned, to diminish immensely tabes mesenterica in the second, to make deaths from diseases of nutrition less likely to occur, and to cut down many fold the cases of drowning by removing the desire for bathing in rivers and ponds. On the other hand, the same cold which we have seen was excessive in December was responsible for the augmented mortality from local diseases, since among these maladies it is only those of the respiratory system which furnish more deaths, especially pneumonia and bronchitis. Though the deaths from zymotic diseases were less in the aggregate, as has been said, there were several of the most important diseases of this class which multiplied their victims very much, as compared with the previous quarter. The deaths from small-pox increased from 50 to 307; those from scarlatina, from 48 to 98; those from diphtheria, from 51 to 101; and those from croup, from 42 to 92.

Undoubtedly the most striking feature in the above comparison is the augmented mortality from small-pox. The steady march onward, which seemed broken in the summer, is not encouraging; the most to be said is, that it is not as bad as it might be. Compare, for instance, the course of the disease in the severe epidemic of 1871–72 in Philadelphia. The progressive monthly increase in the number of deaths from September to December, 1871, reads, 18, 236, 735, 861. This year in the same months the mortality was, 33, 43, 85, 189. In the earlier year the advance was frightfully rapid; in the later it goes in slower measures. The question suggests itself, What is the cause of this difference? Can it be accounted for by diverse degrees of intensity in the poison of the two epidemics? A negative answer is supplied by the experience of Camden, a small city situated directly opposite Philadelphia, on the Jersey side of the Delaware River. Variola was carried there from Philadelphia in February, 1880, and caused, as I am informed by Dr. James H. Wroth, of that city, in the space of one year, among a population of 41,638 inhabitants, 131 deaths. The same proportion of deaths to population in Philadelphia would bring up the mortality in the latter city during the first year after the appearance of the disease in November, 1879, to 2,264 deaths, instead of the actual mortality of 156. Assuredly, then, the poison of the present epidemic could show intense activity under certain conditions, and we may claim that the removal of those conditions explains the happier result in Philadelphia; that the prompt effort at isolation of the sick, the lessening of the number of the unprotected by wide vaccination and revaccination, and the elimination of unsanitary surroundings, had their legitimate effects.

But the more rapid increase in the mortality from small-pox in Philadelphia as we enter the second year of its invasion—85 deaths in November and 189 in December, more than in the whole of its first year—points out only too clearly that the means of repression employed have failed of a perfect success. They have not been used with sufficient thoroughness, especially isolation, revaccination, and vaccination.

Isolation is the most urgent measure to be resorted to when small-pox appears in a community, and this was undertaken in every case at first in Philadelphia; but the health authorities soon met with resistance, and deemed it wise, in the absence of a specific law of the commonwealth, or city ordinance, giving them absolute power to remove the sick, not to use physical force in executing this means, except in extreme instances. Most of the cases of small-pox occurred

among the lower class of people, those who live from hand to mouth, as the saying is, who are obliged to go to the provision shop to procure articles for every meal, and of which all the elder members go abroad to their daily work. What opportunities for dissemination of the poison! especially when the messenger to the shop was likely to be a convalescent member of the family, conveniently at home! And yet such people refused to let their sick go to the hospital. If isolation is not complete, then vaccination and revaccination must be complete. To accomplish the last will be found in practice to be almost impossible, certainly so without a most stringently enforced law. It would be necessary, in order to stamp out *infallibly* the disease, for every inhabitant of the city to be at once vaccinated, or revaccinated, as soon as a case of small-pox made its appearance, for the period of immunity gained by vaccination or revaccination is certainly an uncertain one, and it would not do to trust to an operation performed at some previous time. During the epidemic of 1871–72 I reported in the Philadelphia Medical Times (March 15, 1872) a case of varioloid following within three months of successful double vaccination. It is true the attack was exceedingly light, under circumstances of great exposure; but how dangerous even a mild attack of varioloid may prove is seen in an instance which has lately come under my observation. A father, so lightly stricken with the disease that he did not suspect its nature, thinking of no consequence a few vesicles which appeared upon his arms and hands, tended, in the absence of the mother, his child, an unvaccinated infant six weeks old. Variola followed, ending in the death of the child.

Small-pox gains little headway in the central, richest, busiest part of Philadelphia, but few cases being reported from there; the increase in mortality still belongs to the outlying districts formerly known as Kensington and Southwark, respectively, regions most severely visited by the disease in the epidemic of nine years ago.

In a previous letter (February 18, 1880) I mentioned the probability of an exacerbation in the mortality from scarlatina at the close of 1880; that probability has become a fact, the 98 deaths from the disease during this quarter being double the mortality caused by it in the previous three months.

Diphtheria and croup show in their increased mortality nothing more than the usual effect of the season; the 101 deaths from the former and 92 from the latter do not express a mortality sufficiently large to cause one to dread a parallel for Philadelphia to what has occurred in some neighboring cities.

The increase in the number of deaths from typhoid fever, which I noted in my last letter as having occurred in the third quarter of the year, was continued into the last three months, a few more deaths, indeed, falling to the latter period; the customary seasonal decline took place after the August maximum till a number not far from the average for the period of the year was reached in October, but from this month there was an increase in the mortality up to the December maximum, which was greater than that for any year since 1876. I discussed in the letter referred to the reasons for the advance in the August maximum, and now I will take this maximum as the basis to explain the larger number of deaths in December. Assuming that the poison of typhoid fever is produced in successive crops, a position sustained by many considerations, we can readily imagine that the more numerous germs called into existence in August brought forth a greater quantity of the poison than usual in December to sicken and destroy. Fortunately for the future, as regards the mortality from this disease, December was, as we have seen, unusually cold, and the whole winter also uncommonly severe, so that, relying on the acknowledged effect of a prolonged low temperature in antagonizing the poison of typhoid fever, we may expect a lessened effect from its action in the coming spring and summer.

Allusion has already been made to the large number of deaths from diseases of the respiratory organs. The whole number was 484, while in the previous quarter the deaths from the same cause had been but 224; the number exceeded also considerably that reported for the last quarter of 1879, an unusually mild season, when the deaths from diseases of these organs counted 405.

I have added a classified list containing the number of deaths from each cause in Philadelphia during each month of the year 1880, and during the whole year. The total number of deaths, 17,393, gives a death-rate for the year 1880, as already observed, of 20.54 deaths to a thousand persons living. For the year 1879 the death-rate of Philadelphia was 18.65, and for the year 1878 it was 19.38, while the average death-rate for the ten years 1870–'79 was 21.38. Therefore, while 1880 was less healthy than either of the two years just before it, it was still healthier than the average during the preceding ten years. In calculating the above rates, the figures of the United States census for 1870 and for 1880 were taken, and it was assumed that the 172,950 inhabitants which Philadelphia gained during the decade had been added to the several years in equal increments of one-tenth of that sum. This, of course, is not exactly true, but the error is so small that it may be lost sight of in the computation.

Among the causes of death during the year 1880, the following are noted: Consumption 2,647, pneumonia 1,230, bronchitis 405, pleurisy 46, other lung diseases 187, croup 292, diarrhœal diseases 1,642, other diseases of digestive organs 663, Bright's disease 254, cerebro-spinal meningitis 57, apoplexy 299, sunstroke 37, heart diseases 837, diphtheria 316, enteric fever 482, malarial fevers 49, measles 106, scarlet fever 287, whooping-cough 101, puerperal diseases 51, small-pox 421, accidents and violence 660, and old age 688 deaths. Total deaths during the year 17,393; population 846,980; annual death-rate 20.5 per 1,000.

VICKSBURG, MISS.—Dr. W. T. Balfour, health officer, under date of March 2, makes the following report to the State board of health of Mississippi, concerning a case of small-pox which had been taken to the pest-house of Vicksburg:

The patient, P. Flynn, age 28 years, a native of Louisville, Ky., left that city February 21, as deck-hand on the tow-boat *J. S. McDonald*. He states that he was well at the time, and knew of no exposure to small-pox in his boarding-house or elsewhere before leaving Louisville. He was taken sick March 8; the boat reached New Orleans on the 10th, and he remained on board under the care of the captain and steward. Pains in the back and limbs were the first symptoms; no fever was observed till March 12, and on the next day an eruption appeared on the face, spreading in a few hours to the neck and hands. Subsidence of fever followed, and when put off at Vicksburg, March 15, he was first taken to the city hospital. Here the disease was immediately recognized and the patient transferred to the pest-house. The case is one of confluent small-pox and will probably prove fatal. Vaccine virus has been ordered, and all precautions against infection will be taken.

VINELAND, N. J.—Dr. Charles Brewer, under date of April 1, observes that only one case of scarlet fever has occurred in the town during March, and that measles, though still prevailing, are very mild in type. The sanitary authorities are doing all in their power to promote the health of the town.

SANTA CRUZ, PALMA, CANARIES.—United States Consul F. W. Lavers reports 17 deaths in January and 19 in February, none of which were from contagious diseases. Annual death-rate for January, 30.2 per 1,000; for February, 37.4 per 1,000.

SINGAPORE.—United States Consul A. G. Studer reports this district free from infectious and contagious diseases up to February 21. The official report for the month of January gives a total of 325 deaths, of which consumption caused 29; bronchitis, 8; diarrhœa, 35; dysentery, 4; fever, 91; syphilis, 31; small-pox, 3; leprosy, 11.

QUARANTINE NOTICE.

The following notice is published for the information of all concerned:

NEW YORK, *March* —, 1881.

All vessels leaving Mexican and West Indian ports, and ports on the east coast of South America, on and after the 1st of April proximo, not having bills of health, will be treated at this quarantine as vessels suspected of being infected.

WM. M. SMITH, *Health Officer.*

DENMARK.—The Department of State, under date of March 30, informs the National Board of Health that from the 7th day of March the quarantine notice of the Danish Government as to the ports of Caracas, La Guayra, and Porto Cabello is extended to the ports of St. Thomas, West Indies, and Rio de Janeiro, on account of the prevalence of yellow fever in those ports. The notice referred to was published in No. 39 of the BULLETIN, page 745.

ASPINWALL.—Advices from Aspinwall, under date of April 6, report the existence of small-pox at that port and of yellow fever at Panama.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 26, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	18	27.8			18						6				1				4	
Bangor, Me	16,857	5	15.5			5														1	
Concord, N. H	13,838	6	22.6			6						1								2	
Burlington, Vt	11,364	5	22.9			5						2								1	
Boston, Mass	362,535	192	27.6	356,535	6,000	185	7	27.3	60.9			63	2			4				41	2
Cambridge, Mass	52,740	22	21.6			22						5				3				6	
Edgartown, Mass	1,301	2	80.3			2															
New Bedford, Mass	26,875	7	13.6			7														2	
Newburyport, Mass	13,537	8	30.8			8						5								1	
Marblehead, Mass	6,467	1	7.0			1															
Nantucket, Mass	3,726	2	27.6			2												1			
Plymouth, Mass	7,094	2	14.7			1	1														
Fall River, Mass	49,006	30	32.0			30						13						2		3	
Lowell, Mass	59,485	31	27.2			31						8								6	
Lawrence, Mass	39,178	13	17.3			13						5								2	
Pittsfield, Mass	13,367	3	11.7			3														2	
Worcester, Mass	58,295	26	23.2									9				2		2		1	
Lynn, Mass	38,284	11	15.0									3				1				2	
Brockton, Mass	13,608	3	11.5			3														1	
Holyoke, Mass	21,851	3	7.1			3						2									
Bridgewater, Mass	3,620	.....	.....																		
Milford, Mass	9,310	4	22.4			4														1	
Chicopee, Mass	11,325	7	32.2			7						1								3	
Fitchburg, Mass	12,405	1	4.2			1										1					
Somerville, Mass	24,985	8	16.7			8						3									
Springfield, Mass	33,340	16	25.0									8								1	
Spencer, Mass	7,406	1	7.0			1						1								1	
Quincy, Mass	10,529	2	9.9			2						1									
Northampton, Mass	12,172	4	17.3			4						1								1	
North Adams, Mass	10,192	2	10.3			2						2									
Haverhill, Mass	18,475	9	25.4			9						2						1		1	
Gloucester, Mass	19,329	9	24.7			9						5								1	
Chelsea, Mass	21,785	10	23.7			10						4									
Clinton, Mass	8,030	5	32.6			5						1								2	
Beverly, Mass	8,445	1	6.3			1						1									
Attleborough, Mass	11,109	3	13.9			3						1								3	
Malden, Mass	12,617	3	13.0			3						1									
Salem, Mass	27,500	8	15.1			8						4								2	
Taunton, Mass	21,200	6	14.6			6						1								1	
Westboro', Mass	5,217	1	10.0			1															
Woburn Mass	10,982	2	9.6			2														1	
Weymouth, Mass	10,571	3	14.9			3						1									
Waltham, Mass	11,711	3	13.3			3						2									
Webster, Mass	5,696	1	9.2			1															
Westfield, Mass	7,700	1	6.8			1						1									
Brookline, Mass	8,200	2	12.6			2						1								1	
Providence, R. I	104,662	33	16.4	100,862	3,800	29	4	15.0	54.9			12	2			1				5	1
New Britain, Conn	13,978	4	14.9			4						1								1	
Waterbury, Conn	20,269	7	18.0			7						3						1		1	
Fairfield, Conn	3,478	1	15.2			1															
Norwich, Conn	21,150	6	14.6			6						1								1	
Brooklyn, N. Y	566,689	243	22.4			238	5					89	2			5		3		40	1
New York, N. Y	1,206,577	713	30.8	1,186,144	20,433	690	23	30.3	58.7			267				13		17		103	
Yonkers, N. Y	18,892	2	5.2			2						1									
Poughkeepsie, N. Y	20,200	8	20.6			8						1								2	
Newburg, N. Y	18,050	11	31.8			11						2								2	
Buffalo, N. Y	155,159	44	14.8			44						19				1				5	
Watertown, N. Y	10,697	7	34.1			7						2								1	
Binghamton, N. Y	17,315	2	6.0			2															
Cambridge, N. Y	1,850	2	58.2																		
Senaca Falls, N. Y	6,000	2	17.4																		
Tarrytown, N. Y	3,270	1	15.9			1															
Utica, N. Y	33,923	9	13.9			9						4								2	
Little Falls, N. Y	6,940	2	14.7			2						2									
Hudson County, N. J	187,950	97	26.9									34				2		2		8	
Newark, N. J	136,400	58	22.2			58	0					26				1		4		11	
Orange, N. J	12,936	5	19.8	12,479	457	4	1	16.8	114.1			1									1
Camden, N. J	41,658	11	13.7			11						4									3
Plainfield, N. J	8,126	5	32.6			5										1				1	
Asbury Park, N. J	1,640	.....	.....																		
Philadelphia, Pa	846,980	384	23.7	815,182	31,798	365	19	23.4	31.2			112				7		2		43	4
Pittsburgh, Pa	156,381	62	20.7	152,290	4,091	61	1	20.9	13.0			29				2	1	4		4	
Erie, Pa	27,730	11	20.7			11						5						2		2	
Reading, Pa	43,280	14	16.9	42,926	354	14		17.1				9									
Wilmington, Del	42,499	27	33.1			20	7					2	5							4	1
District of Columbia	180,000	88	25.4	120,000	60,000	43	45	18.6	39.0			13	27			2	1			6	11
Norfolk, Va	21,966	16	38.0	11,933	10,033	5	11	18.7	50.8								1				4
Richmond, Va	63,803	22	18.0			9	13					2	6							3	
Lynchburg, Va	15,959	12	39.2			6	6						5							1	1
Wheeling, W. Va	31,266	12	19.5			12						5						2		1	
Wilmington, N. C	17,361	7	21.1				1					2	5								1
Charleston, S. C	49,990	41	42.8	22,713	27,277	19	22	44.3	41.8			10	7							3	5
Augusta, Ga	23,023	10	22.7			5	5					1	1								1
Atlanta, Ga	37,421	9	12.4	21,086	16,335	4	5	9.7	9.5				3				1		1	2	1
Savannah, Ga	30,681	25	42.5	15,007	15,674	4	21	13.9	67.4			1	8				1			1	4
Rome, Ga	5,000	1	10.4																		
Brunswick, Ga	2,900	.....	.....	1,500	1,400																
Jacksonville, Fla	8,000	4	26.1	5,000	3,000	4		41.7								1				3	
Key West, Fla	12,000	3	13.0	8,000	4,000	2	1	13.0	13.0				1							1	
Mobile, Ala	31,205	16	26.8	16,927	14,278	6	10	18.5	36.3			1	3							2	1
Columbus, Miss	5,008	1	10.0	2,533	2,475		1		20.3												1
Natchez, Miss	7,000	2	14.7			1	1						1								
Vicksburg, Miss	11,814	6	26.5			5	1									1					1
New Orleans, La	216,140	147	35.5	159,128	57,111	87	60	28.5	54.7			21	17			4	2	2	1	21	13
Shreveport, La	8,033	9	42.6	3,916	4,117	2	7	26.7	89.3			1									2
Baton Rouge, La	7,187	.....	.....	2,954	4,233																

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 26, 1881.

Cities and States.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		Fever. Typhoid.		Fever. Malarial.		Fever. Scarlet.		Acute lung diseases. Pneumonia.		Acute lung diseases. Congestion of lungs.		Acute lung diseases. Bronchitis, acute.		Acute lung diseases. Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me.																	1						1		1					
Bangor, Me.															2															
Concord, N. H.									1						1		1													
Burlington, Vt.													1																	
Boston, Mass.	7		5		14	1	1		1						29	1			9	1	1		6		2				2	
Cambridge, Mass.															1				1											
Edgartown, Mass.																														
New Bedford, Mass.																														
Newburyport, Mass.																														
Marblehead, Mass.																														
Nantucket, Mass.																														
Plymouth, Mass.																														
Fall River, Mass.	1		1		1		1						1		2		3		1											
Lowell, Mass.	1								2						4				1											
Lawrence, Mass.									1						1															
Pittsfield, Mass.																														
Worcester, Mass.	2				2			2					1		4		1		2				1							
Lynn, Mass.																														
Brockton, Mass.																														
Holyoke, Mass.																			2											
Bridgewater, Mass.																														
Milford, Mass.																														
Chicopee, Mass.									1						1															
Fitchburg, Mass.																														
Somerville, Mass.	1								1								1						1		1					
Springfield, Mass.	1				1										2				1											
Spencer, Mass.																														
Quincy, Mass.															2															
Northampton, Mass.					1																									
North Adams, Mass.															1								1							
Haverhill, Mass.															2															
Gloucester, Mass.					2										1								2							
Chelsea, Mass.					2										3															
Clinton, Mass.																														
Beverly, Mass.					1																									
Attleborough, Mass.																														
Malden, Mass.			1												1															
Salem, Mass.			1												1															
Taunton, Mass.															2										1					
Westboro', Mass.													1																	
Woburn, Mass.																														
Weymouth, Mass.															1		1													
Waltham, Mass.															2															
Webster, Mass.																														
Westfield, Mass.																														
Brookline, Mass.	1																													
Providence, R. I.					2								1		1				2										1	
New Britain, Conn.			1																1											
Waterbury, Conn.			1														1													
Fairfield, Conn.																														
Norwich, Conn.															1		1													
Brooklyn, N. Y.	8		3		17		3				8		11		22		1		11						3		1			
New York, N. Y.	23		17		46		7		9		23		37		81				27				9		14		10		5	
Yonkers, N. Y.																														
Poughkeepsie, N. Y	1														1															
Newburg, N. Y.													1																	
Buffalo, N. Y.	1				2								3		3				1											
Watertown, N. Y.			1												1															
Binghamton, N. Y.															1															
Cambridge, N. Y.																														
Seneca Falls, N. Y.																														
Tarrytown, N. Y.																			2											
Utica, N. Y.			1																											
Little Falls, N. Y.															1								1							
Hudson County N. J.					2		2		3		1		3		13		1		4				1		5		4			
Newark, N. J.	4				2						1		1		3		1								1		1			
Orange, N. J.					1										1															
Camden, N. J.													1				1													
Plainfield, N. J.															1												1			
Asbury Park, N. J.																														
Philadelphia, Pa.	5	1			3		3		6		2		6		25	3	5		12		2		1		2		40	3	1	
Pittsburgh, Pa.	1		2		7		1		1		1		8		4		1		1						1		1		1	
Erie, Pa.							1								3															
Reading, Pa.													2		1															
Wilmington, Del.							1						1		2		1		1											
District of Columbia			2			1			1						3	13		1	1	3					1					
Norfolk, Va.															1	2				2						1				
Richmond, Va.					1										1	3														
Lynchburg, Va.																														
Wheeling, W. Va.			1						1				1																	
Wilmington, N. C.																														
Charleston, S. C.							1					1	9		1	2		1		1		1				1				
Augusta, Ga.									1						2	1														
Atlanta, Ga.			2													1														
Savannah, Ga.				2							1					2			1											
Rome, Ga.																														
Brunswick, Ga.																														
Jacksonville, Fla.																														
Key West, Fla.									1						1															
Mobile, Ala.															1	2							1							
Columbus, Miss.																														
Natchez, Miss.													1				1													
Vicksburg, Miss.																											1			
New Orleans, La.	1		4	1	2		1	1		2	5	3	8	1	4	5			1	2										
Shreveport, La.											1					2														
Baton Rouge, La.																														

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 26, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
San Antonio, Tex	20,597	11	30.9			11						2				1		1		2	
Waco, Tex	8,000	3	19.6	5,000	3,000	1	2	10.4	34.4											1	1
Galveston, Tex	22,308	10	23.5	17,064	5,244	5	5	15.1	49.7			3	3								2
Marshall, Tex	5,449	5	45.9	2,763	2,686	2	3	39.0	59.0							1	1		2		
Little Rock, Ark	13,185	13	51.4			12	1					7								2	
Nashville, Tenn	43,543	16	19.2	27,874	15,669	8	8	14.7	26.4			1	2							2	4
Memphis, Tenn	34,000	23	35.7	17,293	16,707	9	14	27.2	43.7			2	3								1
Clarksville, Tenn	7,250			4,000	3,250																
Murfreesboro', Tenn	3,850			2,000	1,850																
Trenton, Tenn	1,400	1	37.3				1														
Bowling Green, Ky	6,000	3	26.1	4,000	2,000	1	2	13.0	52.2												
Cincinnati, Ohio	255,708	95	19.4			93	2					34	1			4		2		18	
Cleveland, Ohio	160,140	50	16.3													2				5	
Gallipolis, Ohio	4,500																				
Dayton, Ohio	38,677	11	14.8			11						7									
Portsmouth, Ohio	11,314	6	27.7			5	1					2	1							2	
Indianapolis, Ind	75,074	34	23.6			30	4					14				1		3		5	1
Richmond, Ind	12,743	4	16.4			3	1									1					
Evansville, Ind	29,280	9	16.0			7	2					2						2	2	1	
Chicago, Ill	503,298	203	21.0									100				5		10		18	
Peoria, Ill	29,315	10	17.8			9	1					3				1				3	1
Aurora, Ill	11,825	3	13.2			3														1	
Jacksonville, Ill	10,927	3	14.3			3						1									
Elgin, Ill	8,770	4	23.8			4						1									
Moline, Ill	8,200	1	6.5	8,000	200		1	6.4													
Rock Island, Ill	11,660	7	30.6			7						3								2	
Lake, Ill	18,396	10	28.3			10						6								1	
Milwaukee, Wis	115,761	52	23.3			52						25						6		10	
Beloit, Wis	6,500	1	8.0	6,000	1,500	1															
St. Paul, Minn	41,498	10	12.6			10												2		1	
East Saginaw, Mich	19,016	4	11.0			4						1									
Flint, Mich	9,000	2	11.6			2														1	
Dubuque, Iowa	12,117	5	11.8			1															
Davenport, Iowa	21,834	4	9.6			4															
St. Louis, Mo	350,522	166	24.7	328,522	20,000	149	17	23.7	40.4			68	7			4		19	1	14	2
Kansas City, Mo	55,813		12.2			9	4					3	2			1		1	1	1	
Omaha, Nebr	30,518		14.0			7						3						1			
Lawrence, Kans	8,500			6,800	1,700																
Boulder, Colo	3,070		17.2			1														1	
Salt Lake City, Utah	20,768		20.1			8						7									
San Francisco, Cal	212,740	84	20.6									18				5		1		13	
Sacramento, Cal	21,420	15	36.5									5				1					
Vallejo, Cal	7,000	2	14.7			1	1														
Los Angeles, Cal	11,311	4	18.5			4														3	
	8,010,180	3,617	15									1,174	114			80	8	93	8	482	71

ABSTRACTS FROM CONSULAR REPORTS.

ACAPULCO, MEXICO.—United States Consul John A. Sutter reports for three weeks ending March 6, that 20 cases and 14 deaths from small-pox have occurred. The deaths from all causes were 28, giving an annual death-rate of 139 per 1,000. Mean temperature 84°.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys reports for the month of February, 77 deaths in Georgetown, but none from contagious diseases. The population being 20,000, the annual death-rate was 50.2 per 1,000. Mean temperature, 81°.

The consul also reports that the regulation requiring vessels bound for ports in the United States to take bills of health from the consul, when by him advised to do so, has not been observed by the following vessels sailing from Georgetown within the two weeks ending March 9: Brig *O. C. Clary* for New York via St. Kitts; brig *Mary Munro* for New York; schooner *North America* for Boston; and schooner *Fanny Young* for Portland, Me.

BORDEAUX, FRANCE.—United Consul B. Gerrish reports 431 deaths during the month of February. Small-pox caused 11 deaths; typhoid fever, 3; other contagious diseases, 15; consumption, 66; other lung diseases, 45. The population being 215,140, the annual death-rate was 21.5 per 1,000.

CONSTANTINOPLE.—United States Consul G. H. Heap forwards additional telegrams, to March 11, from Dr. Zitterer, with regard to the plague in Persia. The most stringent measures of quarantine have been enforced, and the inspectors advise the evacuation of Djaara and the immediate burning of all infected huts and articles of personal use. The government is called on to furnish food, clothing, and shelter for those deprived of homes and means of living. Dr. Zitterer gives the following symptoms as observed in most of the cases of plague: extreme debility, anorexia, high fever, thirst, foul tongue, headache, glassy eyes, anxious expression; diarrhœa is common, vomiting of blood sometimes, or hæmaturia. Glandular swellings in most cases under the arms or in the groins (hence the name *peste bubonique*); the final symptoms are extreme prostration, coma, and death often occurs in less than 48 hours from the inception of the disease.

GHENT, BELGIUM.—United States Consul A. Lefebvre sends a report for the month of February, showing 1 death from small-pox, 9 from typhoid fever, 2 from scarlet fever, and 3 from diphtheria. Consumption caused 52 deaths, other lung diseases 54, diarrhœal diseases 32, and diseases of the heart 34. The deaths from all causes were 310; population 134,852; annual death-rate 30 per 1,000.

GUAYMAS, MEXICO.—United States Consul A. Willard reports for the month of February 18 deaths, of which 7 were from "fever." No epidemic or contagious disease is reported.

MATAMOROS, MEXICO.—United States Consul W. P. Sutton observes, in his report for the week ending March 19, that small-pox has assumed a milder type since the cold weather has passed; but the number of cases has probably increased. Five deaths from small-pox were reported for the week, out of a total of 12. Annual death-rate, 39.0 per 1,000.

MAZATLAN, MEXICO.—For the month of February, United States Consul E. G. Kelton reports 9 deaths from fever, 8 from diarrhœa, and 11 from consumption. Total deaths 43; population 14,000; annual death-rate 40 per 1,000. Mean temperature 71°.

MOSCOW, RUSSIA.—United States Consul A. Weber reports a total mortality of 1,820, in this city of 601,970 inhabitants, for the month of December, 1880. Annual death-rate, 33.9 per 1,000. Among the causes of death were: Small-pox, 33; typhoid fever, 179; other contagious diseases, 131; consumption, 280; other lung diseases, 189; diarrhœal diseases, 168. The mean temperature for the month was 21°.

NASSAU, BAHAMAS.—United States Consul T. J. McLain, jr., reports, for the two weeks ending March 26, that the island is free from all infectious diseases, and the town in excellent sanitary condition. Mean temperature, 72°.

SANTANDER, SPAIN.—The report from this province for the four weeks ending December 26 gives a total of 439 deaths, of which 97 were under one year, 164 under five years, and 128 over sixty years of age. Small-pox caused 4 deaths; measles, 2; diphtheria and croup, 16; whooping-cough, 5; enteric fever, 3; typhus fever, 5; d[illegible] 29; diarrhœa, 34; malarial fevers, 3; consumption, 3[illegible]

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MARCH 26, 1881—Continued.

Cities and States.	Croup. W.	Croup. C.	Diarrhœal diseases. W.	Diarrhœal diseases. C.	Diphtheria. W.	Diphtheria. C.	FEVER. Erysipelas W.	Erysipelas C.	Typhoid. W.	Typhoid. C.	Malarial. W.	Malarial. C.	Scarlet. W.	Scarlet. C.	ACUTE LUNG DISEASES. Pneumonia. W.	Pneumonia. C.	Congestion of lungs. W.	Congestion of lungs. C.	Bronchitis, acute. W.	Bronchitis, acute. C.	Pleurisy. W.	Pleurisy. C.	Measles. W.	Measles. C.	Puerperal diseases. W.	Puerperal diseases. C.	Small-pox. W.	Small-pox. C.	Whooping-cough. W.	Whooping-cough. C.
San Antonio, Tex.	....	....	....	....	....	....	..	.	1	..	....	....	....	....	1	..	....	....	....	..	....	....	....	....	....	....	....	....	....	....
Waco, Tex.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Galveston, Tex.	....	....	....	....	1	....	..	....	....	....	....	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	..
Marshall, Tex.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Little Rock, Ark.	1	....	....	....	....	....	..	....	....	....	1	....	1	....	2	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Nashville, Tenn.	....	....	....	....	....	....	..	....	....	....	....	....	1	....	1	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....
Memphis, Tenn.	1	....	1	....	....	....	..	....	....	....	....	....	....	....	2	1	....	....	....	....	....	....	2	....	....	....	....	....	....	....
Clarksville, Tenn.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Murfreesboro', Tenn.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trenton, Tenn.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Bowling Green, Ky.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cincinnati, Ohio.	2	....	1	....	3	....	..	1	....	....	....	....	....	....	14	....	1	....	3	....	....	....	2	....	1	....	....	....	1	....
Cleveland, Ohio.	3	....	3	....	3	....	..	....	2	....	....	....	....	....	....	....	2	....	3	....	....	....	....	....	....	....	....	....	....	....
Gallipolis, Ohio.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dayton, Ohio.	....	....	1	....	....	....	..	....	....	....	....	....	....	....	2	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Portsmouth, Ohio.	....	....	1	....	....	....	..	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Indianapolis, Ind	....	....	....	....	....	....	..	....	....	1	1	....	....	....	3	....	....	....	....	1	....	....	....	....	2	....	....	....	....	....
Richmond, Ind.	....	....	....	....	1	....	..	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Evansville, Ind.	....	....	1	....	....	....	..	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Chicago, Ill.	9	....	6	....	9	....	3	....	2	..	1	....	4	....	12	....	4	....	11	....	1	....	1	....	3	....	4	....	....	....
Peoria, Ill.	....	....	....	....	1	....	..	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Aurora, Ill.	....	....	1	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jacksonville, Ill.	....	....	1	....	....	....	..	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....
Elgin, Ill.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
Moline, Ill.	....	....	....	....	....	....	..	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rock Island, Ill.	....	....	....	....	1	....	..	....	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lake, Ill.	1	....	....	....	1	....	..	....	....	....	....	....	1	....	2	....	....	....	....	....	....	....	....	....	1	....	2	....	....	....
Milwaukee, Wis.	....	....	....	....	2	....	..	....	1	....	....	....	3	....	2	....	2	....	....	....	....	....	....	....	1	....	....	....	2	....
Beloit, Wis.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
St. Paul, Minn.	1	....	....	....	....	....	..	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	..
East Saginaw, Mich.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Flint, Mich.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dubuque, Iowa.	....	....	....	....	....	....	..	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Davenport, Iowa.	....	....	1	....	....	....	..	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
St. Louis, Mo.	3	....	1	....	1	1	..	2	..	5	....	....	6	....	13	2	5	....	4	....	....	....	1	....	2	....	....	....	2	....
Kansas City, Mo.	....	....	....	....	2	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....
Omaha, Nebr.	....	....	1	....	1	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lawrence, Kans.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boulder, Colo.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Salt Lake City, Utah.	1	....	....	....	2	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
San Francisco, Cal.	1	....	1	....	1	..	..	....	2	....	....	....	....	....	....	....	1	....	3	....	....	....	2	....	....	....	....	....	....	....
Sacramento, Cal.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Vallejo, Cal.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Los Angeles, Cal.	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	82	1	63	3	136	4	25	3	42	3	51	5	117	1	314	46	39	2	109	10	4	1	35	....	44	3	65	3	13	1

dieases, 24. Births, 453. Population, 235,300. Annual birth-rate, 26.0; annual death-rate, 24.8 per 1,000.

SHANGHAI, CHINA.—United States Consul O. N. Denny, under date of February 16, gives the following reasons for the absence of the desired statistics in his reports: Dr. Neil Macleod, who has furnished the information so far given, states that there are no municipal regulations requiring any report of cases of contagious disease. There are ten physicians practicing in the city, and none of these will make the reports unless required by law, or paid for their trouble. The population is very mixed—nearly all the nations of the world being represented—and in the absence of reports from medical men information could only be obtained through the various foreign consuls. The reports given by Dr. Macleod are correct as to deaths, but only approximate as to cases.

The inclosed report of Dr. Edward Henderson, health officer, for the year 1880, states that 78 deaths of foreigners were registered during the year. Among these the following causes are noted: small pox 3, measles 1, enteric fever 2, cholera 2, heart diseases 4, consumption 12, other lung diseases 3, diarrhœal diseases 5, suicide 2, violence and accidents 9. In view of the large surrounding native population over whom foreign medical officers have but little influence in sanitary matters, it is remarkable that the contagious diseases usually prevailing more or less among the natives have not been epidemic among the foreign residents.

VERA CRUZ, MEXICO.—United States Consul S. T. Trowbridge forwards the official report for February. There were 127 deaths during the month, giving an annual rate of 82.8 per 1,000. Among the causes of death noted are: diarrhœa 4, dysentery 2, malarial fevers 3, pneumonia 1. It is remarkable that consumption does not appear on the list.

The reports for the two weeks ending March 20, show 17 deaths from yellow fever and 7 from small-pox during that time.

ZURICH, SWITZERLAND.—The report for the fourth quarter of 1880 gives 126 births in a population of 25,000; annual rate 20.2 per 1,000. The deaths during the same period were 101; annual rate 16.1 per 1,000. Still-births 11. Among the causes of death were: diphtheria and croup 3, scarlet fever 1, typhoid fever 1, consumption 17, other lung diseases 14, apoplexy 6, diarrhœa 3, suicide 5.

The following reports for the week ending March 26, 1881, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 31; under 5 years, 17; cerebro-spinal meningitis 3, consumption 4, typhoid fever 1, scarlet fever 4, pneumonia 2, measles 1. Bath, Me., 8,000; deaths, 5; consumption 1, congestion of lungs 2. Belfast, Me., 5,308; death, 1. Brattleboro, Vt., 6,000; death, 1. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years, 1; pneumonia 1. Calais, Me., 6,162; death, 1; consumption 1. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 5,990; no deaths. Clinton, Mich., 1,200; no deaths. Columbus, Ga., 10,000; deaths, 3; under 5 years, 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; deaths, 2; consumption 1. Dallas, Tex., 10,327; deaths, 5; under 5 years, 1; cerebro-spinal meningitis 1, croup 1, typhoid fever 1, pneumonia 1. Decatur, Miss., 1,000; death, 1. Fayette, Miss., 400; no deaths. Gunn City, Mo., 125; no deaths. Hernando, Miss., death, 1; puerperal 1. Huntingdon, Pa., 4,500; death, 1. Iuka, Miss., 816; no deaths. Indianola, Tex., 800; no deaths. Jefferson, Tex., 3,250; deaths, 3; under 5 years, 2; consumption 1, pneumonia 1, puerperal 1. Kenosha, Wis., 5,500; no deaths. Louisiana, Mo., 5,000; deaths, 3; under 5 years, 1; diarrhœa 1, measles 1. Madison, Ind., 9,009; deaths, 3; under 5 years, 2. Meridian, Miss., 4,013; no deaths. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; death, 1; congestion of lungs 1. Muscatine, Iowa, 8,412; death, 1; under 5 years, 1; scarlet fever 1. Muskegon, Mich., 11,300; death, 1; typhoid fever 1. Niles, Mich., 4,200; death, 1; pneumonia 1. Painesville, Ohio, 5,504; deaths, 2; consumption 1. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; death, 1. Rensselaer, Ind., 900; death, 1; under 5 years, 1; accident 1. Senatobia, Miss., 935; death, 1; consumption 1. Springfield, Ohio, 21,000; deaths, 13; under 5 years, 6; accident 1; consumption 4, whooping-cough 1. Starkville, Miss., 1,454; death, 1; consumption 1. Summit, Miss., 1,760; deaths, 3; consumption 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; death, 1. Tuscaloosa, Ala., 2,000; no deaths. Verona, Miss., 1,000; no deaths. Winchester, Va., 5,000; deaths, 2; under 5 years, 1; scarlet fever 2. Winona, Minn., 10,000; deaths, 2; accidents 2. Youngstown, Ohio, 15,421; deaths, 3; under 5 years, 1; malarial fever 1; pneumonia 1. Total population, 283,050; deaths under 5 years, 35; total number of deaths, 95; annual rate per 1,000, 17.5.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	Mar. 19	3	34.8													53
Canada	Montreal	135,000	Mar. 19	66	25.5												6	34.1
Do	Port Sarnia	4,000	Mar. 28	2	26.1													
Cuba	Havana	195,437	Mar. 19	173	46.2						26		7					80
Mexico	Matamoras	16,000	Mar. 19	12	39.1						5							
Do	Vera Cruz	20,000	Mar. 13	27	71.3				8		6							78.8
Do	do	20,000	Mar. 20	26	68.7				9		1							79.2
Azores	Fayal	7,630	Jan. 22	2	13.7													57
Do	do	7,630	Jan. 29	5	34.2													57
Do	do	7,630	Feb. 5	4	27.4													59
Do	do	7,630	Feb. 12	3	20.5													61
Do	do	7,630	Feb. 19	7	47.9													58
Do	do	7,630	Feb. 26	8	54.7													56
Grand Canary Isl'ds	Las Palmas	18,000	Feb. 12	14	40.5													
Do	do	18,000	Feb. 19	12	34.7							1	1					
St. Helena	Jamestown	6,241	Feb. 19	1	8.4													81.5
Do	do	6,241	Feb. 26	1	8.4													81.5
Ireland	Queenstown	10,000	Mar. 19	1	5.0													
Do	Belfast	230,000	Mar. 12	106	31.6								1		2		4	
Do	do	230,000	Mar. 19	103	30.7								3				4	
Do	Dublin	333,401	Mar. 12	216	33.7								3		6		8	47.5
Do	do	333,401	Mar. 19	194	30.3						2		1		1		5	46.7
Scotland	Leith	59,958	Mar. 12	25	21.7												6	43.2
Do	do	59,958	Mar. 19	17	14.7												2	45.8
Do	Dundee	155,100	Mar. 12	74	24.1											10		40.1
England	London	3,707,130	Mar. 12	1,590	22.4						58		17				82	
Do	Liverpool	549,834	Mar. 12	281	26.7					7		2		5	1	14	17	48.4
Do	do	549,834	Mar. 19	208	25.7					8	1	3	3	9	2	20	15	46.2
Do	Sheffield	304,938	Mar. 12	139	23.2													48.6
Do	do	304,938	Mar. 19	121	20.7													44.2
Do	Bradford	197,196	Mar. 12	73	18.7												3	
Do	Tunstall	27,775	Mar. 19	12	22.1													50.2
Wales	Cardiff	83,389	Mar. 19	30	18.7					2							1	46.5
France	Paris	1,988,806	Mar. 19	1,158	30.5						31		44				98	
Do	Rouen	104,209	Mar. 19	41	20.4													
Do	Lyons	342,815	Mar. 5	178	27.1						22		4				7	
Holland	Amsterdam	316,952	Mar. 12	173	28.5								2				4	46
Do	Rotterdam	152,515	Mar. 12	81	28.1					1						7		
Do	do	152,515	Mar. 19	83	28.4					1	1					23		
Germany	Berlin	1,123,171	Mar. 5	492	22.8					4		10	13	4	5	121	54	29.1
Do	Bremen	112,200	Mar. 5	40	18.6						1		1				2	
Do	Breslau	273,000	Mar. 5	186	35.5								3				17	28.3
Do	Barmen	95,000	Mar. 5	41	22.9								2				5	34.7
Do	Brunswick	74,000	Mar. 12	45	31.6												3	40.5
Do	Cologne	144,751	Mar. 12	73	26.3								1				5	
Do	Mannheim	53,500	Mar. 19	22	21.5													
Do	Hamburg	400,000	Feb. 26	205	26.7								2				5	
Do	Frankfort	137,000	Mar. 12	46	18.0												4	37.4
Bavaria	Munich	230,000	Mar. 12	130	29.5						1		1				15	
Belgium	Brussels	406,638	Mar. 12	203	25.9								5				5	
Saxony	Dresden	22,216	Mar. 5	102	21.1							1	1					34.3
Do	Chemnitz	95,135	Mar. 5	61	33.4												3	27
Do	Leipsic	151,616	Mar. 12	56	19.2												2	41.6
Denmark	Copenhagen	235,254	Mar. 1	111	24.6							6	1			10		26.9
Do	do	235,254	Mar. 8	99	22.0							3	1			18		26.1
Italy	Rome	305,409	Feb. 26	180	30.8						30		4				5	50.7
Austria	Vienna	731,191	Mar. 5	452	28.1						23						14	34.3
Do	do	731,191	Mar. 12	453	27.1								2				27	47.7
Hungary	Buda-Pesth	370,037	Feb. 26	245	34.5						11		4				8	
Do	do	370,037	Mar 5	267	37.6						12		3				6	
Roumania	Bucharest	177,646	Mar. 12	103	30.3						1		3				9	
Russian Poland	Warsaw	379,763	Mar. 15	173	23.8						2							22.5
Sweden	Stockholm	169,429	Mar. 5	101	32.2												12	14.9
Norway	Christiania	120,000	Mar. 5	47	20.4					1		3	1			11	5	12.9
Spain	Cadiz	65,028	Mar. 5	35	28.1													61.1
Do	do	65,028	Mar. 12	28	22.6													66.5
Do	Seville	138,000	Mar. 6	53	20.0										2		11	64.4
Do	do	138,000	Mar. 13	65	24.6												13	66.2
Barbary	Tripoli	20,000	Mar. 12															73.6
Egypt	Alexandria	220,000	Mar. 12	139	33.0													
Cape Colony	Cape Town	35,000	Feb. 21	20	29.8													88
Do	do	35,000	Feb. 28	29	43.2													84
Seychelles Islands	Mahé	12,000	Jan. 29	2	8.7													
Do	do	12,000	Feb. 5	5	21.7													
Do	do	12,000	Feb. 12	6	26.0													
Do	do	12,000	Feb. 19	3	13.0													
India	Calcutta	429,535	Feb. 19	213	25.8	12	8			8		10		1		6		71.6
Do	Bombay	644,500	Feb. 19	443	34.1													

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NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, APRIL 16, 1881. [No. 42.

A STATE BOARD OF HEALTH FOR INDIANA.

The following bill has been passed by the legislature of Indiana:

A BILL ESTABLISHING A STATE BOARD OF HEALTH, DEFINING ITS PURPOSES, POWERS, AND DUTIES; PROVIDING A SYSTEM OF REGISTRATION AND REPORT OF VITAL AND SANITARY STATISTICS IN CONNECTION THEREWITH, AND PRESCRIBING THE DUTIES OF CERTAIN STATE, COUNTY, TOWNSHIP TOWN, AND CITY OFFICERS IN RELATION THERETO.

SECTION 1. *Be it enacted by the general assembly of the State of Indiana*, That a board is hereby created and established which shall be known under the name of the State board of health. It shall consist of 5 members, as follows: 4 members who shall be appointed by the governor, with the consent of the senate, and a secretary as prescribed in section four of this act. The 4 members so appointed shall be so designated by the governor that the term of office of 2 shall expire on the last day of February, 1883, and 2 on the last day of February, 1885. Thereafter the governor, with the consent of the senate, shall biennially appoint 2 members who shall hold their offices for four years. Any vacancy in said board may be filled by the governor until the next regular meeting of the general assembly.

SEC. 2. The State board of health shall have the general supervision of the interests of the health and life of the citizens of this State. They shall especially study the vital statistics of this State, and endeavor to make intelligent and profitable use of the collected records of deaths and of sickness among the people. They shall make sanitary investigations and inquiries respecting the causes of disease, and especially of epidemics, the causes of mortality, and the effects of localities, employments, conditions, ingesta, habits, and circumstances on the health of the people. They shall, when required, or when they deem it best, advise officers of the government, or other State boards, in regard to the location, drainage, water supply, disposal of excreta, heating and ventilation of any public institution or building. They shall, from time to time, recommend standard works on the subject of hygiene for the use of schools of the State; and it shall be the duty of the board to examine into the purity and chemical qualities of the intoxicating liquors used as a beverage in this State, and report what, in their best judgment, is the effect of the use of such intoxicating liquors as a beverage upon the industry, prosperity, happiness, health, and lives of the citizens of the State. They shall, prior to the 15th day of November of each year, make a report to the governor of their doings, investigations, and discoveries during the year ending on the 31st day of October next preceding, with such suggestions in regard to legislative action as they may deem important.

SEC. 3. The board shall meet at least once each quarter, in the city of Indianapolis, and as often as they may deem necessary, and at such other places and times as they may deem expedient. A majority shall be a quorum for the transaction of business. They shall choose one of their number to be their president, who shall serve two years, unless his term of office as a member of the board shall sooner expire. They may adopt rules and by-laws, subject to the provisions of this act. They shall have authority to send their secretary or a committee of the board to any part of the State when deemed necessary to investigate the cause of any special or unusual disease or mortality.

SEC. 4. At their first meeting, or as soon as a competent and suitable person can be secured, the board shall elect a secretary, who shall, by virtue of such election, become a member of the board, and its executive officer, and who shall serve four years, unless sooner removed for just cause by the votes of 3 members of the board voting therefor. The board shall deliver to such secretary a written statement of the cause of removal, and also state the cause of such removal at the next session of the general assembly.

The board may elect one of their own number secretary, in which case the governor shall appoint another member to complete the full number of the board.

SEC. 5. The secretary of the board of health shall be a physician, and the health officer of the State. He shall keep his office at Indianapolis, and shall perform such duties as are prescribed by this act, or may be required by the board.

He shall keep a record of the transactions of the board; shall have the custody of all books, papers, documents and other property belonging to the board which may be deposited in his office; shall, so far as practicable, communicate with other State boards of health, and with the local boards of health within this State; shall keep and file all reports received from such boards, and all correspondence of the office appertaining to the business of the board. He shall, so far as possible, aid in obtaining contributions to the library and museum of the board. He shall prepare blank forms of returns, and such instructions as may be necessary, and forward them to the clerks of the several boards of health throughout the State. He shall collect information concerning vital statistics, knowledge respecting diseases, and all useful information on the subject of hygiene, and through an annual report and otherwise, as the board may direct, shall disseminate such information among the people.

SEC. 6. The secretary shall receive an annual salary not to exceed $1,200, which shall be fixed by the State board of health. The board shall quarterly certify the amount due him, and on presentation of said certificate the auditor of state shall draw his warrant on the State treasurer for the amount. The members of the board shall receive no per diem compensation for their services, but their traveling and other necessary expenses while employed on the business of the board shall be allowed and paid upon an itemized account, verified by the oath of the member for whom such claim is made.

SEC. 7. The State board of health shall have supervision of the system of registration of births, deaths, and marriages, as herein provided, and they shall make up such forms and shall from time to time recommend such legislation as they may deem necessary for the thorough registration and report of vital and sanitary statistics throughout the State. The secretary of the board shall be superintendent of all such registration, and the clerical duties and safekeeping of the bureau of vital and sanitary statistics thus created shall be provided for by the secretary of state upon requisition of the secretary of the State board of health, approved by the president thereof.

SEC. 8. The trustee and assessor of each township, the trustees of each town, the mayor and common council of each incorporated city, except where a regular constituted board of health, by ordinance of such city, now exists or may hereafter be created, and the board of county commissioners of each county, shall constitute a board of health, *ex officio*, for each of the several towns, cities, and counties of the State, who shall perform such duties as are respectively required of them by this act, without compensation. They shall annually, in the month of January of each year, complete their organization by the election of a secretary, who shall be a physician. The secretary of such local boards of health and the secretary of any regular constituted board of health of any incorporated city shall be the health officer of every town, city or county for the purposes provided in this act, and shall be allowed such compensation from the town, city or county as the board electing them may determine: *Provided*, That the secretary of each county board of health shall render such medical and surgical services as may be required by persons confined in the county jail of such county, and such other medical services as may be required by the board of county commissioners.

The board of health of each county shall act in conjunction with the State board of health, and it shall be the duty of the secretary of such county boards, at least once in each year, and as often as may be deemed necessary by the State board of health, to report such facts and statistics as may be required under instructions from, and according to forms and blanks furnished by, said board; and the board of health of each town and city, situate in any county of this State, shall act in conjunction with the board of health of such county; and it shall be the duty of the secretary of such local boards, at least once each quarter, and as often as may be deemed necessary by the county board, to report such facts and statistics as may be required under instructions from and according to forms and blanks furnished by the State board of health through such county boards. And every physician in each town, city, and county shall be required to report to the secretary of the board of health of such town, city or county, such facts and statistics as may be required by him under the direction of the county board, or of the State board through such county board; and such town, city, and county boards shall have authority, and it shall be their duty in the locality concerned, under the direction of the State board of health, to promulgate and enforce such regulations for the preservation of public health and the prevention of epidemic and contagious diseases, as may be deemed advisable by them; and any per-

son or persons or the officers of any corporation neglecting or refusing after having been notified in writing to comply with the requirements of such regulations, shall be guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than $5 nor more than $25, and each day said failure or refusal shall continue shall, after proper notification, constitute a separate offense.

SEC. 10. It shall be the duty of all physicians and accoucheurs in this State to register their names and post-office address with the clerk of the circuit court of the county in which they reside, and all such physicians and accoucheurs shall report to the secretary of the board of health of the town, township, or city in which they may occur, and within fifteen days thereafter, all births and deaths which may occur under their supervision, with a certificate of the cause of death and such co-relative facts as may be required in the blank forms furnished as provided in this act. When any birth or death shall occur with no physician or accoucheur in attendance, then such birth or death shall be reported as hereinbefore provided by the householder where or under whose observation such birth or death may occur, with the cause of death if such be known. Any physician, accoucheur, or householder willfully or purposely, after notice by the secretary of the local board under whose jurisdiction such householder may live, failing or refusing to comply with the provisions of this section, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined in any sum not less than five dollars nor more than ten dollars: *Provided*, That any death coming under the jurisdiction or supervision of any coroner shall be by him reported to the secretary of the board of health of the town, city, or county in which such death may occur, within fifteen days after such death comes under his jurisdiction, and such death so reported shall not be required to be reported by any other person.

SEC. 11. The clerk of the circuit court of each county in this State shall be required to keep a book especially prepared and set apart for the registration of name and post-office address of physicians and accoucheurs of their county. And it shall be the duty of such clerk to report to the health officer of the county, on or before the 5th day of each month, the number of certificates of marriages that have been recorded during the preceding month, together with the names of parties contracting such marriage and the date when such marriage was solemnized: *Provided*, That the clerk shall be entitled to charge each physician and accoucheur so registered a fee of ten cents and no more, and the county commissioners shall allow such clerk 50 cents, and no more, for each monthly return made to the health officer of said county.

SEC. 12. It shall be the duty of the board of health of each county to keep a complete record, according to the form prescribed by the State board, of all marriages, births, and deaths reported to them under the provisions of this act, and such record shall be open to the inspection of any citizen without fee.

SEC. 13. It shall be the duty of the State board of health to prescribe the form for the records of marriages, births, and deaths to be used in the office of the secretary of the county board, and prescribe such forms, and the secretary of the State board shall, upon requisition of the health officer of each county, furnish him, and through him the secretary of each local board in such county, such blanks as may be required for the gathering and reporting of vital and sanitary statistics, according to the provisions of this act.

SEC. 14. And it shall be the duty of the secretary of state to provide a suitable office for the meetings of the State board of health, and for the secretary thereof.

SEC. 15. The sum of $5,000 per annum, or so much thereof as may be necessary, is hereby appropriated to pay the salary of the secretary and other necessary expenses of the State board of health, according to the provisions of this act. And the expenses of the State board of health shall in no event exceed the amount herein appropriated.

SANITARY LEGISLATION IN TENNESSEE.

Dr. J. D. Plunket, member of the State board of health, sends his report on vital statistics, from which the following remarks and copy of recent act of legislature are taken:

All of the older civilized countries and many of the States of the Union have made provision upon their statute-books for the registration and tabulation of vital statistics. Tennessee, however, is still among the few which have no law upon the subject, unless we make exception of a law relating to marriage licenses enacted by the legislature of North Carolina in 1778, and which is still operative in Tennessee, viz:

"Before being joined in marriage the parties shall produce to the minister or officer aforesaid—'all justices of the peace, judges and chancellors, in the State may solemnize the right of matrimony'—a license under the hand of the clerk of the county court where the female resides, or where the marriage is solemnized, directed to such minister or officer, authorizing the solemnization of a marriage between said parties." [Act 1778, ch. 7, secs. 2 and 3.]

This was amended by the legislature of Tennessee in 1815 and 1838 as follows:

"The minister of the gospel, or justice of the peace, or judge or chancellor, who solemnizes the right of matrimony, shall endorse on or append to the license the time of marriage, and sign his name thereto, and return the license to the clerk of the county court within six months thereafter.

"The clerk shall, at the foot or back of each license, place the following form of certificate, to be signed by the person solemnizing the marriage:

"I solemnized the rite of matrimony between the above (or within) named parties on the —— day of ——, 18—.

"It shall be the duty of the clerk to register, in a well-bound book, the names of the parties and the date of the issuance of a marriage license, and to copy immediately under or opposite thereto, the return of the proper functionary who solemnized the rites of matrimony, and the date thereof, and file and retain the license and return thereof in his office." [Acts 1815, ch. 47; 1838, ch. 118.]

It was also again amended in 1865–6, as follows:

"It shall be the duty of the officer or minister who has solemnized such marriages to return the certificate of the marriages to the office of the county court clerk of the proper county, and for a failure thereof he shall be liable to indictment or presentment for a misdemeanor, and this act to take effect from its passage." [Act 1865–6, ch. 58, sec. 2.]

REGISTRATION LAW.

An act to provide for the registration of births, marriages, and deaths in Tennessee.

SECTION 1. *Be it enacted by the general assembly of the State of Tennessee*, That every justice of the peace, minister of the gospel, and all other legally-authorized persons solemnizing marriage in this State, shall make a record of each marriage so solemnized by him, together with all the facts relating to the same, as required by the fifth section of this act; and such justice, minister of the gospel, or other person shall, at the time such marriage is solemnized, deliver on demand to either of the parties so joined in marriage as aforesaid a certificate of such marriage containing all the facts thereto, required by said fifth section of this act, and shall, within thirty days thereafter, deliver to the clerk of the county court in which such marriage took place a certified copy of such record.

SEC. 2. That every physician, surgeon, and midwife, who may be in professional attendance at any birth or death in this State, or in the absence of any or all of the aforesaid parties the head of or senior member of said household wherein said birth or death occurred, shall, within thirty (30) days thereafter, file a written statement, duly certified to, of the fact, together with such other facts pertaining thereto, as are required in section five (5) of this act, with the senior (by age) justice of the peace of the civil district in which said birth or death occurred.

SEC. 3. It shall be the duty of the aforesaid justice of the peace in each civil district in the State, on receiving the returns of such births or deaths, to record the same in a book to be furnished by the county, properly ruled in the order in which they are received by said justice, and once within each and every thirty days make and deliver to the county court clerk of the county in which such civil district is located a certified copy of such record.

SEC. 4. It shall be the duty of every coroner in this State to keep, in a well-bound book, a record of every inquest held in his district, and within thirty days after the holding of such inquest he shall deliver to the county court clerk of the county wherein said coroner has jurisdiction a certified copy of such record, giving all the facts as required in section five (5) of this act for other deaths.

SEC. 5. It shall be the duty of the county court clerk of the several counties in this State, on receiving the returns of such births, marriages, and deaths, to record the same at length in separate books (well bound) to be provided by the county for that purpose, with proper indexes thereto. The births, marriages, and deaths shall be numbered and recorded in the order in which they are received by the said clerk, and the record of marriages shall be indexed, using both the name of bridegroom and bride. The record of births shall state, in separate columns, the date of the birth, the name of the child (if it have any), the sex and color of the child, the place of birth, the christian and surname of both parents, the residence and nativity of the parents, the occupation of the father, and the date when the record was made: *Provided*, That in case the child has no christian name, such name shall be obtained and reported by the head of the household wherein said birth occurred, within thirty days after his or her attention has been called to the fact by the senior (by age) justice of the peace, who shall do so *at once* upon discovering the omission, and such christian name shall be distinctly designated in such report as the christian name belonging to a child previously reported, and shall be properly entered by said justice in the blank left for such christian name in his book of record.

The record of marriages shall state, in separate columns, the date and place of marriage, the christian and surname of the bridegroom and bride, and the maiden name of the bride, if a widow, the color, age, and place of birth of each, the residence of each at the time of marriage, the occupation of the bridegroom and the name and official station of the person by or before whom they were married, the name and residence of at least two witnesses present at such marriage, and the date when such record was made.

The record of deaths shall state, in separate columns, the date of

the death, the christian and surname of the deceased, the sex and color, whether married or single, the age in years, months, and days, the place of death, the disease or apparent cause of death, the nativity of the deceased and the occupation, if any, and the names and residence of the parents, if known, and the date when such record was made.

The clerk of the county court of the several counties shall annually, on or before the 1st day of April, make and transmit to the secretary of state a certified copy of the records in his office of all the births, marriages, and deaths reported in their respective counties for the year ending December 31, last preceding.

And each county court clerk shall receive for the record of each birth, marriage, and death in his office three cents; and three cents for each birth, marriage, and death returned by him to the secretary of state, to be paid by the county upon the presentation of a certificate from the secretary of state that the duties herein imposed upon said county court clerks have been performed, and shall be compensation for all services required by this act to be performed by him.

SEC. 6. It shall be the duty of the secretary of state to receive the returns made in pursuance of the fifth section of this act, and he shall cause the same for each year to be bound together in one or more volumes at the expense of the State, and make indexes thereto, and with the assistance of the secretary of the State board of health, who is hereby constituted *ex-officio* "the superintendent of vital statistics," shall prepare such tabular statements, results, and deductions therefrom as will render them of practical utility, and make report thereof annually to the governor of the State, which report may be ordered published and distributed in such manner as the legislature may from time to time direct.

SEC. 7. Nothing contained in this act shall be so construed as interfering with the manner adopted at the time of the passage of this act by any municipality in this State for collecting such vital statistics, and it is hereby made the duty of every such municipality to cause to be made once in every thirty days a transcript of such municipal record, which, after being duly certified to, they shall cause the same to be delivered to the clerk of the county court in which county said municipality is located.

SEC. 8. In case of the refusal or neglect, by any of the officers or individuals mentioned in this act, to perform any of the duties hereinbefore required of them, or either of them, to be done and performed by any of the provisions herein contained, such officer or person shall be guilty of a misdemeanor, and upon conviction shall be fined not less than five nor more than fifty dollars, and the prosecuting attorney in each county or judicial district of the State is hereby required to prosecute, in the name of the people of the State of Tennessee, all persons in his county or judicial district who shall violate any of the provisions of this act.

SEC. 9. *Be it further enacted*, That all laws or parts of laws coming in conflict with this act be, and are hereby, repealed, and that this act take effect from and after its passage, the public welfare requiring it.

REGULATIONS FOR CONSULAR FEES.

APRIL 9, 1881.

The following regulations of the Treasury Department are published for the guidance of consular officers in the collection of fees provided for by the act of Congress "to prevent the introduction of contagious and infectious diseases into the United States," approved June 2, 1879.

By reference to the regulation dated September 1, 1879, it will be seen that the fee for the bill of health provided for by the statute is fixed at $2.50, and the actual expenses incurred in placing a vessel in proper sanitary condition are to be paid by the owners or master. The fee of 25 cents for the examination of each person by the medical officer is modified by the regulation of the Treasury Department, dated November 29, 1880, published herewith, and is fixed at $5 for fifty persons and under, &c., as therein stated.

From the fund thus created consular officers will pay all expenses incurred, including charges for boat hire and medical examinations.

T. J. TURNER,
Secretary National Board of Health.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
September 1, 1879.

The department is in receipt of your letter of the 14th ultimo, in which, by direction of the executive committee of your Board, you inclose a copy of a communication from Mr. A. B. Wood, chief of the consular bureau of the State Department, accompanied by a printed copy of rules and regulations, made by your Board and approved by the President, to be used and complied with by vessels in foreign ports, under the authority of the act approved June 2, 1879.

The object of submitting these rules and regulations appears to be to secure action on the part of this department in fixing fees for certain services therein required. An examination of the act in question shows that the only fee which the statute requires in terms to be fixed by this department is that under section 6, in connection with the necessary expenses in placing vessels in proper sanitary condition. Under this section the regulations provide that the consular officers in foreign ports shall, upon the request of the owner, agent, or master, cause an inspection of every ship or vessel bound to any port of the United States, and upon such inspection issue the bill of health required by these regulations. In regard to this fee, it may be stated that section 1745 of the Revised Statutes directs that the President shall prescribe from time to time the rates or tariffs of fees to be charged for the official service of consular officers abroad.

Under the authority of this section the President has fixed, and the State Department promulgated in its regulations of 1874, p. 78, a consular fee for a bill of health at $2.50. This fee is to be exacted by the consul and by him paid into the Treasury as part of the receipts of his office; and it would not seem that a second fee is necessary for the bill of health required to be given by the regulations issued by the Board, except that in cases arising under paragraph 12 of the said regulations, where the departure of the vessel is delayed beyond the twenty-four hours therein specified, an addition to such fee of 50 per cent. may properly be made. The regular fee for the bill of health is, therefore, fixed at $2.50. The actual expenses incurred in placing the vessel in proper sanitary condition will, of course, vary with the circumstances of each case, and are to be paid by the ship-owners or masters; and it would not seem that any scale of prices for such services can be established. For the inspection and report under paragraph 11 of said regulations, a fee of 25 cents is hereby fixed for each person examined by the medical officer or physician selected for the purpose.

These are all the fees which it seems to this department are required to be fixed by the authority of these regulations.

Very respectfully,

H. F. FRENCH,
Assistant Secretary.

J. L. CABELL, M. D.,
President National Board of Health, Washington, D. C.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. C., November 29, 1880.

SIR: Your letter of the 23d instant is received, in relation to a proposed schedule of fees to be substituted for the fee of 25 cents for each person, established by department letter to you of September 1, 1879, for the medical examination of persons on vessels in foreign ports about to sail for ports in the United States.

You state that you are directed by the executive committee of the National Board of Health to say that, in its opinion, the proposed schedule is just and equitable, and will doubtless secure in each case an amount adequate to the expense incurred.

The department, therefore, directs that the letter of September 1, 1879, be so far modified as to prescribe fees for the personal examination authorized by the "act to prevent the introduction of contagious or infectious diseases into the United States," approved June 2, 1879, as follows:

Fees for medical examination of persons on vessels bound from foreign ports to ports of the United States—

For fifty persons and under	$5 00
From fifty to one hundred persons, for each ten additional persons or less	1 00

Over one hundred, at the rate of $5 for each additional hundred persons.

In the cases which have arisen at the port of Kanagawa, Japan, the fees will be adjusted and settled on the basis of the above schedule.

Very respectfully,

JOHN SHERMAN,
Secretary.

Dr. J. L. CABELL,
President National Board of Health, Washington, D. C.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NATIONAL BOARD OF HEALTH BULLETIN.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 2, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
l, Me	32,810	15	23.1			15						2								3	
, N. H	13,838	6	22.6			6						1								2	
ton, Vt	11,364	2	9.2	11,248	116	2		9.1				1									
Mass	362,535	161	23.2	356,535	6,000	159	2	23.4	17.4			50	1			4				25	1
lge, Mass	52,800	12	11.7			12						7								1	
wn, Mass	1,301																				
iford, Mass	26,875	11	21.4			10	1					1								2	1
yport, Mass	13,537	6	23.1			6						1								2	
ead, Mass	7,467	1	7.0	7,451	16	1														1	
tet, Mass	3,726	1	13.8		1																
h, Mass	7,094	5	36.8			4	1					3									
er, Mass	49,006	27	28.8									10								4	
Mass	59,485	25	21.9	59,307	178	25		21.8				9				1				2	
e, Mass	39,178	17	22.6			17						8						1		2	
l, Mass	13,367	4	15.6			4														3	
ass	38,284	11	15.0			11						1								3	
a, Mass	13,608	6	23.0			6						1								2	
, Mass	21,851	8	19.1			8						3				1		2			
ater, Mass	3,620			2,600	20																
, Mass	11,325	4	14.4			4						2									
rg, Mass	12,405	5	21.0			5														1	
lle, Mass	24,985	11	23.0			11						2								4	
ld, Mass	33,340	14	21.9									3								2	
Mass	7,466	2	14.0			2						1				1				1	
Mass	10,529	2	9.9			2										1					
npton, Mass	12,172	3	13.0			3														1	
dams, Mass	10,192	5	25.7			5						1				1					
ll, Mass	18,475	5	14.1			5						1						1		2	
ter, Mass	19,329	5	13.7			5						2									
Mass	21,785	9	21.3			9						2								1	
Mass	8,030	8	52.2			8						2								2	
Mass	8,445	4	25.5			4						2				1				1	
ough, Mass	11,109	3	13.9			3														1	
Mass	12,017	2	8.7			2															
lass	27,500	6	11.5			6						3								1	
, Mass	21,200	8	19.2			8						1								4	
o', Mass	5,217	2	20.0			2														1	
Mass	10,982	4	19.1			4															
ath Mass	10,571	4	19.8			4						1				1					
n, Mass	11,711	7	31.0			7						1								1	
r, Mass	5,696	3	27.5			3						2									
d, Mass	7,700	1	6.8			1															
ne, Mass	8,030	3	18.8	8,024	6	3						1									
, Mass	16,966	3	9.1			3						1								1	
ace, R. I	104,850	53	26.4	100,862	3,800	50	3	25.8	41.2			17	2					1		3	1
ven, Conn	62,882	23	19.1			22	1					5						1		3	
tain, Conn	13,978	5	18.7			5						1								1	
ury, Conn	20,269	4	10.3			4						2				1					
, Conn	3,478																				
, Conn	21,141	4	9.7			4						1				1					
rk, N. Y	1,206,577	697	30.1	1,186,144	20,433	672	25	29.4	63.8			275				19		17		101	
n, N. Y	566,689	251	23.1			245	6					83	3			4		1		34	1
, N. Y	18,892	11	30.4			11						1								6	
epsie, N. Y	20,207	7	18.1			7						2								1	
g, N. Y	18,050	9	26.0			9						3								2	
N. Y	155,159	67	22.5			67						24				5		2		8	
wn, N. Y	10,697	5	24.4			5						1				1				1	
rton, N. Y	17,315	7	21.1			7						2									
ge, N. Y	1,850																				
Falls, N. Y	6,000	2	17.4			2															
Y	33,913	10	15.4													1				2	
alls, N. Y	6,940	3	22.1			3										1				1	
County, N. J	187,950	92	25.5									40				5		5		8	
, N. J	136,400	75	22.5			71	4									1				10	
N. J	13,206	4	15.8	12,749	457	4						1									
, N. J	41,658	31	38.8			22	9					12	6							2	1
d, N. J	8,126	4	26.1			4						2									
Park, N. J	1,640																				
phia, Pa	846,980	370	22.8	815,182	31,798	341	29	19.5				102				4		2		58	6
gh, Pa	156,381	85	28.4	152,290	4,091	84	1	47.6				45	1			1		2		6	
	27,730	18	33.9			18						5				2		1		4	
, Pa	43,280	16	19.3	42,926	354	16						5								4	
gton, D. C	42,499	19	23.3			11	8					1	2			1		1		2	1
ct Columbia	180,000	85	24.5			45	40	19.5	34.7			11	14			1				9	9
ad, Va	63,803	33	27.0			12	21					6	11			1			1		4
g, W. Va	31,266	13	21.2			12	1					3								1	
gton, N. C	17,361	2	6.0				2										1				1
on, S. C	50,000	41	42.7	22,713	27,286	19	22	44.3	41.8			5	7							3	1
s, Ga	23,023	12	27.2			7	5					1	1							2	2
Ga	37,421	13	17.9	21,086	16,335	7	6	17.1	19.1			2	3				1			1	2
h, Ga	30,681	19	32.3	15,007	15,674	10	9	34.8	28.9											2	2
ia	5,000	3	31.3			3						2									
ck, Ga	2,900	1	18.0	1,500	1,400		1		37.3												
ville, Fla	8,000	5	32.6	5,000	3,000	3	2	31.3	34.4				2								
st Fla	12,000	1	4.3	8,000	4,000	1		6.5				1									
Ala	31,205	11	19.9	16,927	14,278	4	7	12.3	25.4				3								
ila	7,505	3	20.9	3,425	4,080	1	2	15.2	25.6				1								
s, Miss	5,003			2,533	2,470																
, Miss	7,500																				
rg, Miss	11,814	9	39.8			3	6						3			1				1	
eans, La	216,140	109	26.2	158,370	57,761	60	49	19.7	44.7				1							10	7
ort, La	8,033	6	28.4	3,916	4,117	3	3	40.0	38.3				2					1			
ouge, La	7,187	2	14.5	2,954	4,233	1	1	17.6	12.3											1	1
onio, Tex	20,597	8	20.6			7	1						3			1				1	
'ex	8,000																				
n, Tex	22,308	11	25.8	17,080	5,228	10	1	30.2	9.9				2								

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 2, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Marshall, Tex	5,449	4	36.7	2,763	2,686	1	3	19.5	58.6									2			
Nashville, Tenn	43,543	36	43.2	27,874	15,669	15	21	27.5	69.4	3,219	1,870	4	8				1			4	1
Memphis, Tenn	34,000	30										5	2			2			1	4	
Clarksville, Tenn	7,250	1	7.2				1		16.1				1								
Murfreesboro', Tenn	3,850	2	27.6	2,000	1,850		2		58.0				1								
Trenton, Tenn	1,400																				
Louisville, Ky	123,625	59	24.9			39	20					11	8							7	6
Bowling Green, Ky	6,000	2	17.4	4,000	2,000		2		52.1												
Cincinnati, Ohio	255,708	96	19.6			90	6					34				3		3		19	1
Cleveland, Ohio	160,140	48	15.6													1				6	
Gallipolis, Ohio	4,500	5	58.0			5						1								1	
Dayton, Ohio	38,677	6	8.1	37,688	989	6		8.3				1								1	
Portsmouth, Ohio	11,314	3	13.8	10,314	1,000	3		15.3				2									
Indianapolis, Ind	75,074	33	22.9			27	6					10				1		2	1	5	1
Richmond, Ind	13,000	3		12,400	600																
Evansville, Ind	29,280	11	19.6			9	2					3	2					1	1		
Chicago, Ill	503,304	199	20.6			199						89				7		9		21	
Peoria, Ill	29,315	3	5.3			3										1					
Aurora, Ill	11,825	6	26.4			6														1	
Jacksonville, Ill	10,927	5	23.9			5						2									
Elgin, Ill	8,770	4	23.8			4												2			
Moline, Ill	8,200	3	19.1	8,000	200	3		19.6				1									
Rock Island, Ill	11,660	5	23.8			5						2						1			
Lake, Ill	18,396	3	8.5							2,704	3	1						1			
Milwaukee, Wis	115,578	53	23.8			53						32						3		5	
Beloit, Wis	5,150	3	30.1	5,000	150	3		31.3				1									
St. Paul, Minn	41,498	10	12.6			10														3	
East Saginaw, Mich	19,016	5	13.7			5						1								1	
Flint, Mich	9,000	4	23.2			4						2				1					
Keokuk, Iowa	12,117	4	17.2			2	2					1				1					
St. Louis, Mo	350,522	156	23.2	328,522	22,000	141	15	22.4	35.6							6		32		14	4
Kansas City, Mo	55,13	12	11.2			9	3					3						2	1	2	2
Omaha, Nebr	30,518	18	30.8			16	2					8	1					3		1	
Boulder, Colo	3,030	1	17.2			1															
Salt Lake City, Utah	20,768	8	20.1			8						4						1		1	
San Francisco, C. I	212,740	73	23.4									21				2				18	
Sacramento, Cal	21,420	3										2								1	
Vallejo, Cal	7,000	4	29.4			4														1	
Los Angeles, Cal	11,311	5	23.1			5						2				1				1	
	8,052,093	3,616										1,034	91			88	3	99	6	482	56

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysis are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

INTERNATIONAL MEDICAL AND SANITARY EXHIBITION.

Notice is given by Mark H. Judge, secretary of Parke's Museum of Hygiene, University College, Gower street, London, that this exhibition will be open at South Kensington from July 16 to August 13, 1881, on the occasion of the meeting of the International Medical Congress.

NATIONAL BOARD OF HEALTH rooms, 1410 G st.. N. W.

ABSTRACTS FROM CONSULAR REPORTS.

CONSTANTINOPLE.—United States Consul G. H. Heap, under date of March 22, forwards telegrams from the infected district on the Euphrates. It appears that the government has exercised most commendable promptness in aiding the sanitary authorities, and that very active measures have been enforced to prevent the spread of the plague.

MALAGA, SPAIN.—United States Consul H. C. Marston, sends through the Department of State a copy of the following quarantine order from the Spanish Government:

MADRID, *March* 12, 1881.

According to a telegram received from our consul, the plague has broken out in Djaara, in the district of Reljed, on the river Euphrates. If it should reach the ports of the Sea of Azof, the Black Sea, and those of Arabia, you will apply to this department for instructions as to the regimen to which vessels are to be subjected. I transmit the foregoing to you for your guidance. Let the order be obeyed.

The DIRECTOR *of the Health Department at Madrid.*

To the SUPERINTENDENT *of the Health Department at Malaga.*

MALTA AND GOZO.—United States Consul C. B. Eynaud reports for the two weeks ending February 28 one death from typhoid fever, but none from any other contagious disease. Total deaths, 151; population, 154,830; annual death-rate, 25.4 per 1,000.

SANTOS, BRAZIL.—United States Consul W. T. Wright forwards a report on the climate and health of this city. Since May, 1880, there has been no contagious or infectious disease in the city or shipping. Much improvement has been made in the drainage and general sanitary condition of the city. The rapid growth of all kinds of weeds offers a constant obstacle to the efforts towards strict cleanliness in any city under such a climate.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 2, 1881—Continued.

Cities and States.	Croup. W.	Croup. C.	Diarrhœal diseases. W.	Diarrhœal diseases. C.	Diphtheria. W.	Diphtheria. C.	Erysipelas. W.	Erysipelas. C.	Fever: Typhoid. W.	Fever: Typhoid. C.	Fever: Malarial. W.	Fever: Malarial. C.	Fever: Scarlet. W.	Fever: Scarlet. C.	Acute lung diseases: Pneumonia. W.	Acute lung diseases: Pneumonia. C.	Acute lung diseases: Congestion of lungs. W.	Acute lung diseases: Congestion of lungs. C.	Acute lung diseases: Bronchitis, acute. W.	Acute lung diseases: Bronchitis, acute. C.	Acute lung diseases: Pleurisy. W.	Acute lung diseases: Pleurisy. C.	Measles. W.	Measles. C.	Puerperal diseases. W.	Puerperal diseases. C.	Small-pox. W.	Small-pox. C.	Whooping-cough. W.	Whooping-cough. C.
Marshall, Tex.															1															
Nashville, Tenn.		1								1			1		2	4	1	1					2	2	1					
Memphis, Tenn.		2					1			1		1			4					1			1							
Clarksville, Tenn.																							1							
Murfreesboro', Tenn.																														
Trenton, Tenn.					1										4	3			1	2										
Louisville, Ky.															1															
Bowling Green, Ky.			2		1		1		2						12	1	1		2				1		2		1			
Cincinnati, Ohio.			1		2				2				2				2		1				1							
Cleveland, Ohio.			1																1											
Gallipolis, Ohio.															1															
Dayton, Ohio.									1																					
Portsmouth, Ohio.							1				1		2						1						2					
Indianapolis, Ind.																														
Richmond, Ind.			1												2	1														
Evansville, Ind.	3		3		7				3		2		4		16		3		12		1				2		4		2	
Chicago, Ill.															1															
Peoria, Ill.			1																						1					
Aurora, Ill.															2								2							
Jacksonville, Ill.	1																													
Elgin, Ill.																									1					
Moline, Ill.									1				1		1															
Rock Island, Ill.															1															
Lake, Ill.	2		2		3		1		1				5		1										1					
Milwaukee, Wis.													1		1															
Beloit, Wis.					1														1						1					
St. Paul, Minn.	1														1															
East Saginaw, Mich.																														
Flint, Mich.							1																		1					
Keokuk, Iowa.		..	3	1	4		1		3	1	6	1	3	1	10	2	1		4		1		1		1					
St. Louis, Mo.											1				2										1					
Kansas City, Mo.	1								1				1				2	1												
Omaha, Nebr.																														
Boulder, Colo.			1		1														1											
Salt Lake City, Utah.			1												7		2										2		1	
San Francisco, Cal.			1														1													
Sacramento, Cal.															2															
Vallejo, Cal.															1				1											
Los Angeles, Cal.																														
	57	3	54		3	132	1	28	1	51	7	41	3	121	4	307	39	31	4	113	10	4	....	24	2	45	2	70	3	16	....

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BUENOS AYRES.—Under date of January 10, Señor Pedro A. Pardo informs the National Board of Health that the Government of the Argentine Republic has recently created a department of hygiene, which will exchange reports with the United States when its work is fully established.

HAVANA, CUBA.—During the week ending April 1, there were 3 deaths from yellow fever and 28 from small-pox. Typhoid fever has increased in one portion of the city so far as to constitute an important element in the prevailing diseases, but so far the mortality has been comparatively small.

In the month of March, there were only 3 deaths from yellow fever, while small-pox caused 110 deaths.

LOWVILLE, N. Y.—Under date of April 6, Dr. F. B. Hough states that in the town of Greig, Lewis County, 32 deaths have occurred during the winter from diphtheria and croup with typhoid symptoms, indicating some local cause. No pollution of the water supply is known to exist, and physicians are inclined to ascribe the prevalence of diseases of typhoid type to the use of potatoes affected by the frost. These potatoes, unripe and altered by the action of cold, form a large part of the diet of the people in the town mentioned. It is thought that the use of such food may have produced the condition of system predisposing those affected to disease of typhoid character.

The following reports for the week ending April 2, 1881, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 28; under 5 years, 15; accidents 2, cerebro-spinal meningitis 1, consumption 3, diarrhœa 1, diphtheria 1, scarlet fever 5, pneumonia 1, bronchitis 1, small-pox 1. Bath, Me., 8,000; deaths, 2; under 5 years, 1; congestion of lungs 1. Belfast, Me., 5,308; deaths, 2. Brattleboro, Vt., 6,000; deaths, 2; pneumonia 1. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years, 2; measles 2. Calais, Me., 6,172; death, 1; consumption 1. Carrollton, Miss., 600; no deaths. Circleville, Ohio, 5,996; death, 1; under 5 years, 1; pneumonia 1. Clinton, Mich., 1,200; deaths, 2; under five years, 1; scarlet fever 1, bronchitis 1. Columbus, Ga., 10,000; no deaths. Corinth, Miss., 2,264; deaths, 2; consumption 1. Crystal Springs, Miss., 955; death, 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Gunn City, Mo., 125; no deaths. Helena, Mont., 3,630; deaths, 2; under 5 years, 1; diarrhœa 1. Hernando, Miss., 1,000; death, 1; under 5 years, 1. Huntingdon, Tenn., 1,200; death, 1. Huntingdon, Pa., 4,500; no deaths. Indianola, Tex., 900; no deaths. Inka, Miss., 816; no deaths. Jefferson, Tex., 3,250; death, 1. Kenosha, Wis., 5,500; no deaths. La Salle, Ill., 8,885; deaths, 6; under 5 years, 3; accident 1, consumption 2, croup 1, enteric fever 1, cerebro-spinal meningitis 2. Louisiana, Mo., 5,200; death, 1; puerperal 1. Madison, Ind., 9,009; deaths, 4. Martinsburg, W. Va., 6,334; deaths, 2; consumption 2. Meridian, Miss., 4,013; no deaths. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; no deaths. Muscatine, Iowa, 8,412; deaths, 2; under 5 years, 1; scarlet fever 1. Muskegon, Mich., 11,300; death, 1; scarlet fever 1. Niles, Mich., 4,200; death, 1. Painesville, Ohio, 5,504; deaths, 3; under 5 years, 1. Pass Christian, Miss., 2,000; death, 1; consumption 1. Pearlington, Miss., 1,200; deaths, 2; pneumonia 1, puerperal 1. Pleasant Hill, Miss., 253; no deaths. Plymouth, Mich., 3,000; deaths, 2; pneumonia 1. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, 5,000; deaths, 2; under 5 years, 1; diphtheria 2. Senatobia, Miss., 935; no deaths. Springfield, Ohio, 21,000; deaths, 11; under 5 years, 4; consumption 4, diphtheria 1; whooping-cough 1. Starkville, Miss., 1,454; death, 1; consumption 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; deaths, 4; consumption 1. Tuscaloosa, Ala., 2,000; no deaths. Watertown, Wis., 10,000; deaths, 7; under 5 years, 3; consumption 1, croup 1, diphtheria 1, scarlet fever 1, pneumonia 1, puerperal 1. Winchester, Va., 5,000; deaths, 6; under 5 years, 1; consumption 2, scarlet fever 1, bronchitis 1. Youngstown, Ohio, 15,421; deaths, 5; under 5 years, 1; accidents 3, cerebro-spinal meningitis 1, malarial fever 1. Total population, 298,272; deaths under 5 years, 37; total number of deaths, 106; annual rate per 1,000, 18.5.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	Mar. 26	1	11.6													49
Canada	Montreal	135,000	Mar. 26	63	24.3								1				6	29
Bermuda	Hamilton	14,867	Mar. 22	6	21.6													63.5
Do	do	14,867	Mar. 29	5	17.5													65
Cuba	Havana	195,437	Mar. 26	172	45.9				1		30		5					70
Hayti	Aux Cayes	9,000	Mar. 12	4	23.2													75
Do	do	9,000	Mar. 19	7	40.6													74
Do	Port-au-Prince	30,000	Mar. 16	11	19.1													81
Do	do	30,000	Mar. 22	9	15.7													82
Do	Gonaives	6,000	Jan. 1	2	17.4													81
Do	do	6,000	Jan. 8	2	17.4													81
Do	do	6,000	Jan. 15	1	8.7													81
Do	do	6,000	Jan. 22	2	17.4													81
Do	do	6,000	Jan. 29	1	8.7													81
Do	do	6,000	Feb. 5	1	8.7													80
Do	do	6,000	Feb. 12	2	17.4													81
Do	do	6,000	Feb. 19	3	26.1													81
West Indies	Curaçoa	12,025	Mar. 5	4	17.4													
Do	do	12,025	Mar. 12	3	13.0													
Do	do	12,025	Mar. 19	4	17.4													
Mexico	Matamoros	16,000	Mar. 26	16	52.2						5							
Do	Manzanillo	800	Mar. 13	3	195.7													
Brazil	Rio de Janeiro	330,000	Feb. 26	221	34.9				8		1		1				7	
Do	do	330,000	Mar. 5	220	34.8				14		1		4				16	
Do	do	330,000	Mar. 12	245	38.7				9		1		5				15	
Canary Islands	Las Palmas	18,000	Feb. 28	17	49.1													
Teneriffe	Santa Cruz	16,610	Feb. 26	9	28.3							1	1					60.5
Do	do	16,610	Mar. 5	8	25.1							2	1					67.4
Ireland	Queenstown	10,000	Mar. 26	5	20.1										1		5	
Do	Belfast	230,000	Mar. 26	94	28.0								2					
Do	Dublin	333,401	Mar. 26	223	34.8								4		6		5	39.5
Scotland	Glasgow	601,266	Mar. 19	202	25.3								10				27	41.6
Do	Leith	59,958	Mar. 26	32	27.8												6	35.9
Do	Dundee	155,100	Mar. 19	74	24.9								1			8	1	
England	London	3,707,130	Mar. 19	1,459	20.5						43		14		1		102	
Do	Liverpool	549,834	Mar. 26	296	28.1					1		5	3	19	2	19	15	38
Do	Sheffield	304,938	Mar. 26	120	20.5													37.8
Do	Tunstall	27,775	Mar. 26	26	48.7												5	41.2
Wales	Cardiff	83,389	Mar. 26	39	24.3												4	43.6
France	Paris	1,988,806	Mar. 26	1,193	31.2						32		45				57	
Do	Lyons	342,815	Mar. 12	202	30.7						14		3				7	
Do	Rouen	104,209	Mar. 26	55	27.4													
Switzerland	Zurich	25,329	Mar. 12	9	18.7												1	
Do	do	25,329	Mar. 19	11	22.9													
Holland	Amsterdam	316,952	Mar. 17	185	30.5								3				6	44
Germany	Berlin	1,123,571	Mar. 12	529	24.5					4	1	11	8	1	1	138	59	38.1
Do	Barmen	95,000	Mar. 12	48	26.3								1					53.2
Do	Bremen	112,200	Mar. 12	59	27.5												1	
Do	Breslau	273,000	Mar. 12	187	35.4								3				17	37.9
Do	Brunswick	74,000	Mar. 19	39	27.4												1	38.4
Do	Cologne	144,751	Mar. 19	100	35.9												9	
Do	Frankfort	137,000	Mar. 19	51	19.8													45.5
Do	Hamburg	400,000	Mar. 5	216	28.2												13	
Do	Mannheim	53,500	Mar. 26	15	14.6													42.6
Bavaria	Munich	230,000	Mar. 19	136	30.8												18	
Saxony	Dresden	221,216	Mar. 12	101	23.8											9	9	43.1
Do	Leipsic	151,616	Mar. 19	67	22.9													42.2
Do	Chemnitz	95,135	Mar. 12	62	34.0													45
Belgium	Brussels	406,638	Mar. 19	182	23.3								5				7	
Do	Antwerp	173,643	Mar. 12	81	24.3					14	3	15	2				1	
Do	do	173,643	Mar. 19	90	27.0					12	4	18	1				2	
Italy	Genoa	185,000	Mar. 26	87	24.4									2	1			50.0
Do	Palermo	219,398	Feb. 6	69	16.4								2					55.4
Do	do	219,398	Feb. 13	86	20.4												2	53.6
Do	do	219,398	Feb. 20	101	24.0												1	53.6
Do	do	219,398	Feb. 27	86	20.4												2	57.2
Do	Leghorn	98,224	Mar. 19	52	27.7								1					55.4
Austria	Vienna	731,191	Mar. 19	434	27.4						24		2		1		24	38.3
Do	Trieste	128,295	Feb. 26	118	48.0						2						4	
Roumania	Bucharest	177,646	Mar. 19	112	32.9						1				1		7	
Hungary	Buda Pesth	370,037	Mar. 12	249	35.1						18		4				5	
Russian Poland	Warsaw	379,763	Mar. 12	174	23.9								4					23.1
Sweden	Stockholm	169,429	Mar. 12	92	28.7												6	48.2
Norway	Christiania	120,000	Mar. 12	46	19.9							1				19	5	45.9
Spain	Malaga	115,882	Mar. 13	81	36.5						4						10	68.7
Do	do	115,882	Mar. 20	67	29.5						4						10	69.2
Do	Cadiz	65,038	Mar. 19	33	26.5													64.9
Barbary	Tripoli	20,000	Mar. 19	6	15.6													65.8
Egypt	Alexandria	220,000	Mar. 19	120	24.2													
Cape Colony	Cape Town	35,000	Mar. 7	20	29.8													82
India	Calcutta	429,535	Feb. 26	253	30.7		32				3		12				6	

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, APRIL 23, 1881. [No. 43.

STER MD ST. N.Y. 33

MONTHLY REVIEW FOR MARCH, 1881.

This month there is a reduction in the mean population represented of 111,385, leaving the average weekly number for the five weeks ending April 2 only 7,968,737. The month of February showed but few changes in death-rates, as compared with January, and the same uniformity is observed in March when compared with the preceding month, the usual change of weather from winter to spring having been delayed much later than usual. The mean death-rate has fallen from 23.60 to 23.22, and this slight decline is due rather to a small but general reduction of the rates of most diseases than to a marked change in any one of them. The death-rate under five years has followed the changes in the general mortality, and is 8.13 per 1,000 for March. During the month all contagious diseases have either remained stationary or declined, excepting a slight increase in measles. Of small-pox 331 deaths are reported, against 308 for February; but the 23 additional deaths may not indicate any increase in the aggregate actual mortality, reports being incomplete.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Mar. 5, 1881	7,754,398	3,410	22.94	1,227	8.25	35.98	1,020	6.86	29.91	532	3.58	15.60	488	3.28	14.31	226	1.52	6.63	133	0.89	3.90
Mar. 12, 1881	8,095,719	3,676	23.69	1,290	8.31	35.09	1,119	7.21	30.44	543	3.50	14.77	576	3.71	15.67	226	1.46	6.15	155	1.00	4.22
Mar. 19, 1881	7,931,777	3,484	22.92	1,277	8.40	36.65	1,037	6.82	29.77	517	3.40	14.85	520	3.42	14.92	207	1.36	5.94	139	0.91	3.99
Mar. 26, 1881	8,009,692	3,617	23.56	1,288	8.39	35.61	1,080	7.03	29.86	553	3.60	15.29	527	3.43	14.57	224	1.46	6.19	141	0.92	3.90
Apr. 2, 1881	8,052,090	3,548	23.00	1,125	7.29	31.70	1,046	6.78	29.48	538	3.48	15.16	508	3.30	14.32	193	1.25	5.44	133	0.86	3.75
Totals	39,843,685	17,735	.....	6,207	.....	.....	5,302	.....	.....	2,683	.....	.....	2,619	.....	.....	1,076	.....	.....	701	.....	.....
Means	7,968,737	3,547	23.22	1,241⅖	8.13	35.00	1,060⅖	6.94	30.00	536⅖	3.51	15.13	523⅘	3.43	14.87	215⅕	1.41	6.06	140⅕	0.92	3.95

Week ending—	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Mar. 5, 1881	93	0.63	2.73	109	0.73	3.20	48	0.32	1.41	41	0.27	1.20	22	0.15	0.64	26	0.17	0.76	29	0.19	0.85	60
Mar. 12, 1881	71	0.46	1.93	112	0.72	3.05	56	0.36	1.52	48	0.31	1.31	37	0.24	1.01	14	0.09	0.38	37	0.24	1.01	64
Mar. 19, 1881	68	0.45	1.95	118	0.77	3.38	46	0.30	1.32	57	0.37	1.64	23	0.15	0.66	21	0.14	0.60	30	0.20	0.86	66
Mar. 26, 1881	83	0.54	2.29	118	0.77	3.26	66	0.43	1.82	45	0.29	1.24	35	0.23	0.97	14	0.09	0.39	56	0.36	1.55	68
Apr. 2, 1881	60	0.39	1.69	125	0.81	3.52	57	0.37	1.61	58	0.38	1.63	26	0.17	0.73	16	0.10	0.45	44	0.28	1.24	73
Totals	375	.....	.....	582	.....	.....	273	.....	.....	249	.....	.....	143	.....	.....	91	.....	.....	196	.....	.....	331
Means	75	0.49	2.11	116⅖	0.76	3.28	54⅗	0.36	1.54	49⅘	0.33	1.40	28⅖	0.19	0.81	18⅕	0.12	0.51	39⅕	0.26	1.10	66⅕

Causes of death.—It has been stated above that these show no changes worthy of note since last month for the country at large. It is only on considering the sections separately that any considerable movement is to be observed.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,904,485	11,342	24.12	3,401	7.24	30.00	1,711	3.64	15.10	1,690	3.60	14.90	822	1.75	7.25	549	1.17	4.84
Southeast	1,046,398	2,546	25.39	845	8.43	33.19	464	4.63	18.23	381	3.80	14.96	64	0.64	2.51	34	0.34	1.34
Northwest	1,827,124	3,502	20.00	953	5.44	27.21	449	2.56	12.82	504	2.88	14.39	175	1.00	5.00	107	0.61	3.05

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	273	0.58	2.41	416	0.88	3.67	134	0.28	1.18	152	0.32	1.34	89	0.19	0.79	61	0.13	0.54	111	0.23	0.98	287
Southeast	30	0.30	1.17	79	0.78	3.10	56	0.56	2.20	35	0.35	1.37	26	0.26	1.02	10	0.10	0.39	35	0.35	1.37	7
Northwest	68	0.39	1.95	86	0.49	2.45	73	0.42	2.08	57	0.33	1.63	26	0.15	0.74	19	0.11	0.54	49	0.28	1.40	35

Distribution of diseases.—In the Northeast measles and whooping-cough have increased, but their respective rates being still only 0.19 and 0.13 per 1,000 they form no important part of the mortality. Malarial fevers and diarrhœal diseases are also more fatal, but their rates are only between 0.23 and 0.28. No increase is observed in any other disease but small-pox, from which 287 deaths are reported, against 249 in February. In Philadelphia, which contributes the largest share of deaths, only 12 have been added to the number for last month. The remaining additions have been widely distributed, and 19 cities have reported deaths this month against 14 for February. The places and deaths are as follows: North Adams, Mass., 1 death; New Britain, Conn., 1; New York, 45; Brooklyn, 3; Poughkeepsie, N. Y., 1; Hudson County, New Jersey, 14; Camden, N. J., 3; Newark, N. J., 1; Plainfield, N. J., 1; Philadelphia, 215; Pittsburgh, Pa., 2; Wilmington, Del., 1; Richmond, Va., 1; Vicksburg, Miss., 1; Brownsville, Tex., 4; Cincinnati, 2; Chicago, 31; Lake, Ill., 2; San Francisco, 2; total, 331.

Southeast section.—In this section only 7 deaths from small-pox are reported, and of these 4 are from Brownsville, Tex., showing that the epidemic is subsiding at that place. The fatal case in Vicksburg was brought from Louisville, Ky. The mortality from measles has doubled since last month, but still reaches only 0.26 per 1,000. Scarlet fever has also increased from 0.59 to 0.78, and a small increase of pulmonary diseases is observed. All others have declined, and the general death-rate of the section has fallen from 26.24 to 25.39 since last month.

Northwest section.—Here also the mortality from measles has been doubled since February, but, as in the Southeast, the disease is still unimportant; the death-rate is only 0.15 for March. Malarial fevers have increased both in the Northeast and Northwest sections, while in the Southeast their rate remains the same. Diarrhœal diseases, which have fallen 15 per cent. in the Southeast, have increased 12 per cent. in the Northeast and 20 per cent. in the Northwest. The increase is therefore not to be referred to elevation of temperature or change of diet, which causes will operate later, and begin at the South. The increased mortality in the northern sections, and especially in the Northwest, is probably due to unusual cold, and a certain epidemic tendency to gastro-intestinal diseases which was noted last month. The deaths from small-pox reported in this section are confined to Chicago and its vicinity. The general death-rate for this section has fallen from 20.42 to 20.00 since February, and remains, as usual, the lowest of the three.

QUARANTINE REGULATIONS.

PORT OF WILMINGTON, N. C., *March* 18, 1881.

The following quarantine regulations will be enforced for the port of Wilmington, and the penalty of $200 for every violation thereof strictly enforced. Pilots violating the same are liable to a loss of their branch:

To entitle a vessel to free pratique in the port of Wilmington, from whatever port she may come, she must show—

1st. A clean bill of health, in accordance with the recommendations of the National Board of Health.

2d. She must show to the satisfaction of the quarantine board that no case of infectious disease has occurred on board at the port of departure or during the passage.

3d. She must be thoroughly cleansed and disinfected and ballast discharged at the quarantine station, and perform any other requirements that may be designated by the quarantine physician.

4th. After performing all these requirements, she may receive a permit in writing from the quarantine physician, which permit must be indorsed by the superintendent of health of New Hanover County before she will be allowed to come to the city.

5th. Universal cleanliness must be preserved on board all vessels detained in quarantine—the forecastle, steerage, and cabin must be scrubbed, all foul wearing apparel and bed clothing of officers, passengers, and seamen must be washed and aired, and all infected articles destroyed, and disinfection practiced as directed by the quarantine physician.

6th. The bilge water must be pumped out twice a day, and water from alongside put in until the water pumped out shall be clear and free from any offensive smell; and wind sails must be kept up in each hatchway, and trimmed to the wind, whenever weather permits.

7th. Commanders of vessels are accountable for all irregularities committed on board their respective vessels, and for the conduct of such of their people as they may send on shore by permission of the quarantine officer; and if any person shall leave a vessel in quarantine, or go on board of such vessel without the written permission of the quarantine officer, he shall, on conviction, suffer punishment as by law provided; and all persons belonging to a vessel in quarantine, are strictly forbidden to take on board any person who did not arrive in such vessel, without a regular permit from the quarantine officer.

8th. All communications between vessels in quarantine is expressly prohibited, and no boat or craft is permitted to go alongside a vessel in quarantine, except the master thereof have a written permission from the quarantine officer.

9th. Provisions and other necessaries intended to be sent on board vessels at quarantine must follow the same rules and regulations which apply to other communications with the vessels, and all arrangements for discharging and taking in cargo must be made with the sanction of the quarantine officer.

10th. Colors must be worn and a light must be hoisted at night, so long as the vessel is detained at quarantine.

11th. All vessels upon which any case of infectious disease has occurred during their passage, or upon which any person has died; all vessels from ports known to be infected with small-pox, yellow fever, cholera, or plague shall not be permitted to approach Wilmington nearer than the quarantine station.

12th. Vessels subject to the above regulations will be designated by notice from time to time to their pilots and others interested in commerce.

13th. The quarantine season will commence on the 1st of May and end on the 1st of November, except that when sickness shall occur on board vessels at other seasons, such vessels shall also come under the above rules.

W. G. CURTIS, M. D.,
Quarantine Physician.

J. C. WALKER, M. D.,
THOMAS F. WOOD,
Consultants.

SANITARY LEGISLATION IN CONNECTICUT.

[An act to prevent irregular medical practice.]

GENERAL ASSEMBLY,
January Session, A. D. 1881.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

SECTION 1. Any transient person, not an inhabitant of this State, who shall by circular, handbill, or any other mode of advertisement, profess to treat, and shall treat, disease or injury by any drug, nostrum, manipulation, or other expedient, shall be fined twenty-five dollars for each day that he shall exercise his profession without procuring a license therefor.

SEC. 2. Selectmen in towns, and the chief officer of police in cities, may issue such licenses upon payment to the town or city treasurer by such transient person of the sum of twenty dollars for each day for which his license may be granted. The license shall distinctly state the number of days for which it shall be in force, and may be renewed at its expiration for any further time, upon the same terms. Such selectmen and chief officer of police shall record such licenses in books kept by them for that purpose, which shall be open to public inspection.

SEC. 3. This act shall not apply to commissioned surgeons in the Army or Navy of the United States, to any persons rendering gratuitous services in cases of emergency, nor to any physician or surgeon coming into this State from another State, to consult in any particular case.

SEC. 4. Prosecutions for violations of this act may be held and determined by police courts, where established, and by justices of the peace in towns in which such courts have no criminal jurisdiction

DIAGRAM REPRESENTING THE MORTALITY FOR THE MONTH OF MARCH, 1881, FROM THE FOLLOWING PLACES.

[The horizontal lines represent mortality over 5 years; the oblique lines represent mortality under 5 years; both represent total mortality per 1,000 per annum.]

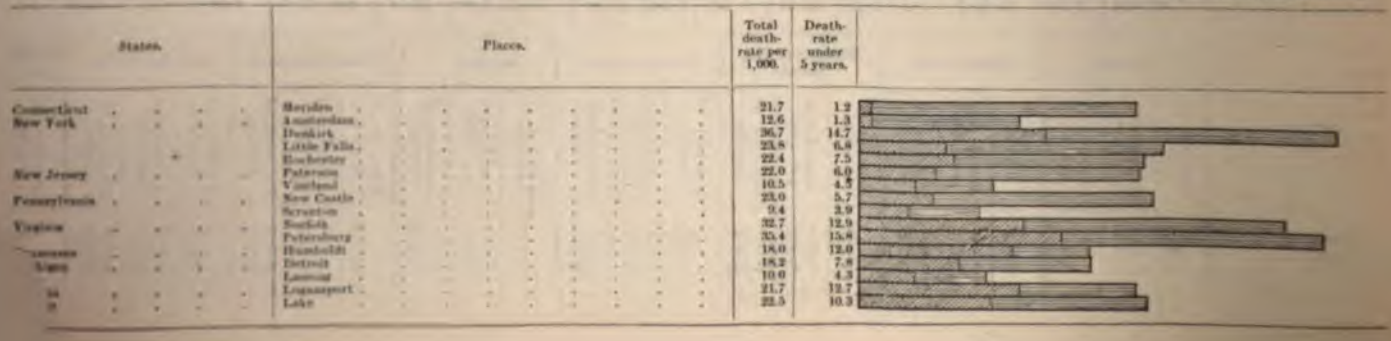
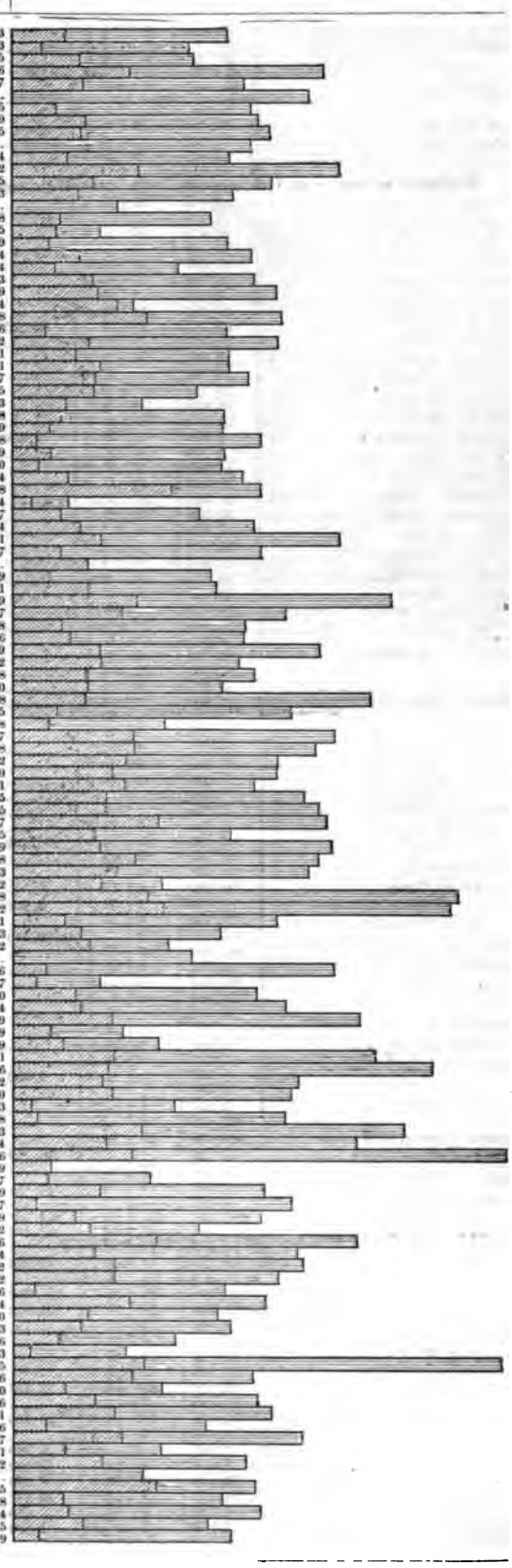


DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FIVE WEEKS ENDING MARCH 5, 12, 19, AND 26, AND APRIL 2, 1881, FROM THE FOLLOWING PLACES.

[Oblique lines represent mortality under 5 years; horizontal lines represent mortality over 5 years; both represent total mortality per 1,000 per annum.]

States.	Cities.	Total death-rate per 1,000.	Death-rate under 5 years.
Maine	Portland	17.5	4.3
New Hampshire	Concord	14.3	2.3
Vermont	Burlington	14.7	5.5
Massachusetts	Boston	25.3	9.6
	Cambridge	18.8	5.7
	Edgartown	24.1	. . . .
	New Bedford	19.4	3.5
	Newburyport	20.0	6.9
	Marblehead	20.9	5.5
	Nantucket	19.3	. . . .
	Plymouth	17.6	4.4
	Fall River	26.6	10.2
	Lowell	21.0	6.5
	Lawrence	17.8	5.3
	Pittsfield	8.6	. . . .
	Lynn	16.1	3.8
	Holyoke	7.1	3.5
	Bridgewater	17 3	2.9
	Chicopee	19.3	6.4
	Fitchburgh	13.4	3.4
	Somerville	19.6	6.3
	Springfield	21.3	6.9
	Spencer	9.7	8.4
	Quincy	21.8	10.8
	Northampton	17.3	2.6
	North Adams	21.5	6.2
	Haverhill	17.5	5.1
	Gloucester	17.6	7.1
	Chelsea	19.2	6.7
	Attleboro'	14.8	6.5
	Malden	10.4	4.3
	Salem	17.2	3.8
	Taunton	17.0	2.9
	Westboro'	20.2	1.8
	Woburn	17.2	2.9
	Weymouth	16.8	2.0
	Waltham	18.6	4.4
	Webster	20.2	12.8
	Westfield	5.4	1.4
	Brookline	15.1	3.7
Rhode Island	Providence	19.5	5.4
Connecticut	New Haven	26.6	7.1
	New Britain	20.1	3.7
	Fairfield	6.0	. . . .
	Norwich	16.0	2.9
	Waterbury	16.4	6.1
New York	New York	30.7	9.9
	Brooklyn	22.1	8.7
	Yonkers	18.7	3.8
	Poughkeepsie	18.6	4.6
	Newburgh	24.8	6.9
	Buffalo	18.3	7.2
	Watertown	19.5	5.8
	Binghamton	16.8	6.0
	Cambridge	29.1	5.8
	Seneca Falls	22.6	3.5
	Utica	12.3	2.8
New Jersey	Hudson County	26.2	9.7
	Newark	24.6	9.8
	Camden	21.5	9.2
	Orange	21.3	7.9
	Plainfield	19.6	9.1
Pennsylvania	Philadelphia	23.7	7.5
	Erie	24.8	7.5
	Pittsburgh	25.4	11.7
	Reading	17.6	6.5
Delaware	Wilmington	25.8	6.9
District of Columbia	District of Columbia	24.7	9.8
Virginia	Richmond	24.0	8.3
North Carolina	Wilmington	12.0	7.2
South Carolina	Charleston	36.1	10.8
Georgia	Savannah	35.4	12.2
	Augusta	21.3	4.1
	Atlanta	16.7	5.3
	Rome	12.5	6.2
	Brunswick	14.4	. . . .
Florida	Jacksonville	26 1	2.6
	Key West	6.9	1.7
Alabama	Mobile	19.7	5 0
	Selma	22.2	5.4
Mississippi	Vicksburg	28.1	7.9
	Natchez	8.8	2.9
	Columbus	11.7	3.9
Louisiana	New Orleans	29.4	8.1
	Shreveport	34.0	7.6
	Baton Rouge	23.2	7.2
Texas	Galveston	22.5	8.0
	Waco	13.0	1.3
	Marshall	22.0	1.8
Arkansas	Little Rock	31.7	10.3
Tennessee	Nashville	27.8	7.4
	Memphis	40.0	9.6
	Clarksville	2.9	2.9
	Murfreesboro'	11.0	2.7
Kentucky	Louisville	20.3	6.9
	Bowling Green	22.6	1.7
Ohio	Cincinnati	20.1	4.9
	Dayton	15.0	6.2
	Gallipolis	27.8	11.6
	Portsmouth	23.0	6.4
Indiana	Indianapolis	23.4	8.2
	Evansville	21.4	8.2
	Richmond	17.2	1.6
Illinois	Chicago	20.4	9.4
	Peoria	16.4	6.0
	Aurora	17.6	5.3
	Elgin	13.1	1.6
	Moline	9.1	1.3
	Rock Island	39.6	10.5
Wisconsin	Milwaukee	19.4	9.6
	Beloit	12.0	4.0
Michigan	East Saginaw	19.7	6.6
	Flint	20.8	8.1
Iowa	Keokuk	15.5	2.6
Missouri	Saint Louis	23.4	8.7
	Kansas City	11.8	4.1
Nebraska	Omaha	18.8	7.2
Colorado	Boulder	10.3	. . . .
Utah	Salt Lake City	19.6	11.5
California	San Francisco	16.8	3.8
	Sacramento	20.0	4.4
	Los Angeles	15.7	5.5
	Vallejo	17.6	1.9



REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 9, 1881.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Portland, Me	33,810	10	15.4			10						3				1				3	
Bangor, Me	16,857	3	9.3			3															
Concord, N. H	13,838	5	18.9			5														3	
Burlington, Vt	11,248	4	18.4			4						1						1		1	
Boston, Mass	362,535	187	26.9	356,535	6,000	180	7	26.5	60.9			56	2			4		1		25	
Cambridge, Mass	52,740	36	35.3			36						14								7	
Edgartown, Mass	1,301																				
New Bedford, Mass	26,875	10	19.4			10						1								2	
Newburyport, Mass	13,537	4	15.4			4										1					
Marblehead, Mass	7,467	3	21.0			3						1				1				1	
Nantucket, Mass	3,726	4	55.3																		
Plymouth, Mass	7,094	5	36.8			5						2									
Fall River, Mass	49,006	21	22.4			21						7				1				4	
Lowell, Mass	59,485	32	28.1	59,307	178	32						11				2				7	
Lawrence, Mass	39,178	9	12.0			9						1				1					
Pittsfield, Mass	13,367	6	23.4			6														6	
Worcester, Mass	58,295	34	30.4									18				1		1		7	
Lynn, Mass	38,284	17	23.2									5								3	
Brockton, Mass	13,608	8	30.7			8						2						1		2	
Holyoke, Mass	21,851	14	33.4			14						10						5			
Bridgewater, Mass	3,620	1	14.4	3,600	20	1															
Milford, Mass	9,310	4	22.4			4						1								1	
Chicopee, Mass	11,323	7	32.2			7						3				1		1		1	
Fitchburg, Mass	12,405	3	12.6			8						2								1	
Somerville, Mass	24,985	12	25.1			12						3								3	
Springfield, Mass	33,340	13	20.3									3				1				1	
Spencer, Mass	7,466	1	7.0			1						1									
Quincy, Mass	10,529	1	5.0			1						1								1	
Northampton, Mass	12,172	1	4.3			1															
North Adams, Mass	10,192	4	20.5			4						1								1	
Haverhill, Mass	18,475	2	5.7																		
Gloucester, Mass	19,329	7	19.2			7						2				1					
Chelsea, Mass	21,785	14	33.2			13	1					4								2	
Beverly, Mass	8,445	2	12.6			2						1				1					
Attleborough, Mass	11,109	4	18.5			4														1	
Salem, Mass	27,500	10	18.9			10						2									
Malden, Mass	12,017	5	21.7			5														1	
Taunton, Mass	21,200	6	14.6			6						2									
Westboro', Mass	5,217	1	10.0																		
Woburn Mass	10,982	5	23.9			5						1								1	
Weymouth, Mass	10,571	3	14.9			3												1		1	
Waltham, Mass	11,711	6	26.6			6						3								1	
Webster, Mass	5,696	2	18.3			2						1									
Westfield, Mass	7,700																				
Brookline, Mass	8,200																				
Newton, Mass	16,966	7	21.2			7						1								2	
Providence, R. I	104,855	50	24.9	101,209	3,646	46	4	23.7	53.9			13	2							10	
New Haven, Conn	62,882	20	16.6			18	2					8	1			1				2	1
New Britain, Conn	13,978	3	11.2			3						1								2	
Waterbury, Conn	20,269	6	15.4			6														3	
Fairfield, Conn	3,750	2	30.5	3,500	250	2															
Norwich, Conn	21,150	6	14.5			6						1						1		1	
New York, N. Y	1,206,577	722	31.2	1,186,144	20,433	710	12	31.2	30.6			253				18		18		118	
Brooklyn, N. Y	566,689	242	22.3			233	9					95	5			6		1		36	2
Yonkers, N. Y	18,892	6	16.6			6						3									
Poughkeepsie, N. Y	20,207	6	15.5			6						1								1	
Newburg, N. Y	18,050	6	17.3			6						2								3	
Rochester, N. Y	89,363	47	27.4									16								7	
Buffalo, N. Y	155,137	41	13.8			41						13				1				7	
Watertown, N. Y	10,697	3	14.6			3						1									
Binghamton, N. Y	17,315	6	18.1			5	1					2								1	1
Cambridge, N. Y	1,850	3	87.4	1,800	50	3						1								1	
Seneca Falls, N. Y	6,000	1	8.7			1															
Tarrytown, N. Y	3,276	1	15.9			1															
Utica, N. Y	33,913	16	24.6			16						5								6	
Hudson County, N. J	187,950	97	26.9									33				1		3		10	
Orange, N. J	13,206	1	3.9	12,749	457	1														1	
Camden, N. J	41,658	23	28.8			21	2					7	2								
Plainfield, N. J	8,126	3	19.7			2	1					1								1	
Asbury Park, N. J	1,640																				
Philadelphia, Pa	846,980	429	26.4	815,182	31,798	398	31	25.5	50.9			141				9		1		65	
Pittsburgh, Pa	156,381	87	29.1	152,290	4,091	82	5	28.0	65.2			42				5		9		8	
Erie, Pa	27,730	10	18.8			10						5								1	
Reading, Pa	43,289	13	15.7	42,926	354	13		15.7				6									
Wilmington, Del	42,499	23	28.2			17	6					4	3			1		1		4	3
District of Columbia	180,000	96	27.7	120,000	60,000	41	55	17.8	47.7			10	24			1	4			8	15
Norfolk, Va	21,966	17	40.4	11,933	10,033	5	12	22.1	61.6											1	1
Richmond, Va	63,803	33	27.0			13	20					5	8							4	4
Lynchburg, Va	15,959	8	26.2			5	3					1	2							1	1
Wheeling, W. Va	31,266	17	27.7			15	2					4								3	
Wilmington, N. C	17,361	3	9.0			1	2										1			1	1
Charleston, S. C	50,000	43	44.8	22,713	27,286	18	25	41.9	47.5			4	7							2	2
Augusta, Ga	23,023	6	13.6			2	4						1								
Atlanta, Ga	37,421	12	16.5	21,086	16,335	4	8	9.8	25.5			1	3				1				1
Rome, Ga	5,000	3	31.3			3							1								
Brunswick, Ga	2,900			1,500	1,400																
Jacksonville, Fla	8,000	4	26.1	5,000	3,000	3	1	31.3	17.2											2	1
Key West, Fla	12,000	3	13.0	8,000	4,000	2	1	13.0	13.0			2									1
Mobile, Ala	31,295	8	13.4	16,837	14,368	2	6	6.2	21.7			1	2				1				
Selma, Ala	7,500	3	20.9	3,425	4,080		3		38.4												1
Columbus, Miss	5,230	2	20.0	2,760	2,470		2		40.7				2								
Natchez, Miss	7,500																				
Vicksburg, Miss	11,814	6	26.5			3	3														
New Orleans, La	216,140	131	31.6	159,128	57,231	86	45	28.2	41.0			24	10			3	1			29	8
Shreveport, La	8,033	4	18.9	3,916	4,117	1	3	13.3	38.3				1							1	
Baton Rouge, La	7,187	4	28.8	2,954	4,233		4		49.3				1								

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 9, 1881.

Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Cities and States.
								Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.										
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
		1				1								1																Portland, Me.
														1		1														Bangor, Me.
														1																Concord, N. H.
																														Burlington, Vt.
4		1		13	1	1		3	1			2		22	1	1		8		1		3		4				1		Boston, Mass.
1		1		3										6		1		1												Cambridge, Mass.
																														Edgartown, Mass.
		1						1				1												1				1		New Bedford, Mass.
				1																										Newburyport, Mass.
														1																Marblehead, Mass.
																														Nantucket, Mass.
																														Plymouth, Mass.
				1																										Fall River, Mass.
				1		1												3												Lowell, Mass.
								3								1														Lawrence, Mass.
				1								2		6		2						1						1		Pittsfield, Mass.
				3										1																Worcester, Mass.
																														Lynn, Mass.
				1				2		1				3										1						Brockton, Mass.
																2														Holyoke, Mass.
																														Bridgewater, Mass.
														1																Milford, Mass.
1				2										2																Chicopee, Mass.
1		1												4	1							1								Fitchburg, Mass.
																														Somerville, Mass.
1																														Springfield, Mass.
																														Spencer, Mass.
																														Quincy, Mass.
		1						1						1		1		1												Northampton, Mass.
				1										1				1				1								Malden, Mass.
																														Taunton, Mass.
																														Westboro', Mass.
																		1												Woburn, Mass.
																														Weymouth, Mass.
				1																										Waltham, Mass.
																														Webster, Mass.
																														Westfield, Mass.
																														Brookline, Mass.
						1		2																						Newton, Mass.
				6		1		1						6	2			3				2		1				1		Providence, R. I.
	2			1				1				1		2																New Haven, Conn.
																														New Britain, Conn.
														1		1														Waterbury, Conn.
																														Fairfield, Conn.
																														Norwich, Conn.
28		11		32		8		12		9		37		82				31				9		9		9		4		New York, N. Y.
7	1	2		19		2		1		3		14		19				2		15								2		Brooklyn, N. Y.
																		1						2						Yonkers, N. Y.
								2																						Poughkeepsie, N. Y.
						1																								Newburg, N. Y.
								1		1				7																Rochester, N. Y.
				6								1		3				2												Buffalo, N. Y.
						1																								Watertown, N. Y.
												1		1																Binghamton, N. Y.
												1																		Cambridge, N. Y.
																1														Seneca Falls, N. Y.
																														Tarrytown, N. Y.
										2		2		2				2												Utica, N. Y.
4		1		6				5		1		3		8		1		2						4		6				Hudson County, N. J.
				1				1		1		4		1												1				Orange, N. J.
			1																											Camden, N. J.
																														Plainfield, N. J.
																														Asbury Park, N. J.
5		3		2				12				12		36								1		1		36				Philadelphia, Pa.
1				2				6				12		7		2		2						4		1		1		Pittsburgh, Pa.
		1		1		1						1		1														1		Erie, Pa.
1												3																		Reading, Pa.
1												3										1						1		Wilmington, Del.
1		1		1				1				2		1	7			1	3			1								District of Columbia.
				1											4				1					1						Norfolk, Va.
															3						1					1			1	Richmond, Va.
															2															Lynchburg, Va.
		2		3										3																Wheeling, W. Va.
																														Wilmington, N. C.
		1	1	1	2	1			1			5	5		2		1												Charleston, S. C.
														1	1															Augusta, Ga.
																1														Atlanta, Ga.
															2											1				Rome, Ga.
																														Brunswick, Ga.
																														Jacksonville, Fla.
																														Key West, Fla.
			1											1								1								Mobile, Ala.
																														Selma, Ala.
															2															Columbus, Miss.
																														Natchez, Miss.
								1																						Vicksburg, Miss.
		5							1	1	1	10	4	9	4			5	1			1	1							New Orleans, La.
															1															Shreveport, La.
																														Baton Rouge, La.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 9, 1881—Continued.

Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
				W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
San Antonio, Tex	20,561	4	10.3			4							1							1	
Waco, Tex	8,000			5,000	3,000							3	1							1	1
Galveston, Tex	22,253	14	32.8			10	4					6	3			1		1	1		1
Little Rock, Ark	13,185	10	39.6			5	5						1								2
Nashville, Tenn	43,461	26	31.2	27,774	15,637	13	13	23.8	42.9			4	7				1	1		2	3
Memphis, Tenn	33,593	19	29.5			8	11					4	6				2			1	
Clarksville, Tenn	7,250	2	14.5	4,000	3,250	2		26.1													
Murfreesboro', Tenn	3,850			2,000	1,850																
Trenton, Tenn	1,400	1	37.2																		
Louisville, Ky	123,625	49	20.7			36	13					13	5			1		1		3	4
Bowling Green, Ky	6,000	3	26.1	4,000	2,000	1	2	13.0	52.2												
Cincinnati, Ohio	255,708	116	23.7			109	7					45				4		1		16	2
Cleveland, Ohio	160,140	49	16.0													1				5	
Dayton, Ohio	38,677	10	12.4			9	1														
Gallipolis, Ohio	4,500	2	23.2			2														2	
Portsmouth, Ohio	11,314	3	13.8			3														1	
Indianapolis, Ind	75,074	34	23.6			29	5					12						4		4	2
Richmond, Ind	12,743	4	16.4			4						1									
Evansville, Ind	29,280	10	17.8			8	2									2	1	1			
Chicago, Ill	503,298	172	17.8									77				6		5		24	
Peoria, Ill	29,315	4	7.1			4						1								2	
Aurora, Ill	11,825	4	17.6			4						1								1	
Jacksonville, Ill	10,927	8	38.2			6	2					2						1		3	1
Elgin, Ill	8,770	9	53.6			9						1				1					
Moline, Ill	8,000	1	6.5			1						1									
Rock Island, Ill	11,660	8	34.9			8						3				1		1			
Lake, Ill	18,396	5	14.2			5						2									
Milwaukee, Wis	115,578	50	22.4			50						27						2		5	
Beloit, Wis	5,150	1	10.1			1															
East Saginaw, Mich	19,016	4	11.0			4						2									
Flint, Mich	9,000	4	23.2			4						3						1		1	
Lansing, Mich	8,500	4	11.0									1									
Keokuk, Iowa	12,117	6	25.8			5	1					3									
St. Louis, Mo	350,522	177	26.3	328,522	22,000	159	18	25.2	42.8			53	4			10	2	16	2	17	5
Kansas City, Mo	55,813	12	11.2			10	2					6	1								
Omaha, Nebr	30,518	9	15.4			9						8						1		1	
Lawrence, Kans	8,500																				
Boulder, Colo	3,070	1	17.2			1						1									
Salt Lake City, Utah	20,768	9	22.6			9						4				1					
San Francisco, Cal	234,144	73	16.3									20				1				12	
Vallejo, Cal	7,000	1	7.4			1															
Los Angeles, Cal	11,311	2	9.2			2															
	8,068,757	3,729	23.9									1,174	104			91	14	81	3	519	64

ABSTRACTS FROM CONSULAR REPORTS.

BANGKOK, SIAM.—United States Consul J. A. Halderman, under date of February 21, refers to the note of his predecessor as giving the reasons, which still exist, to prevent him from supplying any accurate statistics.

Though the city has about a half a million of inhabitants it has no system of sanitary regulation, no hospitals, nor any record of mortality or disease. The dead are burned, and this cremation is usually done by the priests, in the temple grounds, for one or two dollars for those of the poorer classes. In case of epidemic and unsual mortality the bodies are left exposed in the public *salas*, or dead-houses, where they are often devoured by vultures, carrion crows, pariah dogs, or swine.

The people lead a simple life; their diet is chiefly of rice, fish, and fruit; their dress is scanty; they work only when necessity compels, and live peaceably in their Buddhist faith. Small-pox, dysentery, and malarial fevers are the prevailing diseases, but the natives do not probably show a greater rate of mortality than most of the nations who claim a higher place in the scale of civilization. In this respect they compare favorably with the small colony of foreigners who enjoy the advantages of civilized customs, food, and physic.

CONSTANTINOPLE.—Under date of March 25, United States Consul G. H. Heap writes as follows, concerning the plague on the banks of the Euphrates:

I inclose two additional telegrams relative to the plague epidemic in Irak, province of Bagdad. The returns of mortality have not yet been given, but it is evident that the disease is of the most virulent type, and if it is allowed to pass the military lines drawn around it will spread far and wide with great rapidity. Ali Meshed (or Nedjeff) is a sanctuary of great holiness to the Mohammedan sect to which the Persians belong, and they annually send great numbers of corpses there to be interred, in the belief that it secures to the souls of the deceased a favored place in heaven. A large pit is opened to receive these remains, and the emanations from this receptacle have almost invariably been followed by an epidemic of typhus fever. The bodies, which come in hundreds at a time, are wrapped in cloths and placed in rows in the vault, without being covered with earth. The Ottoman government has asked the Persian authorities to discontinue the practice of sending the bodies in a state of decomposition, and to keep them till reduced to skeletons. This ghastly trade is a source of much revenue to the caravans.

The telegrams referred to above are as follows:

1. Dr. Zitterer, under date of March 14, gives the details of the formation of the military *cordon* which is designed not only to isolate the infected district, but to prevent intercourse between the several villages and tribes in that district.

2. Under date of March 23 the inspector-general at Constantinople informs Dr. Zitterer that the sanitary council directs the extension of the *cordon* so as to cut off communication with Bagdad on the north by the road to Mossoul. The council also authorizes the employment of the physicians required to carry out the directions of the inspectors.

GIBRALTAR, SPAIN.—United States Consul H. J. Sprague, under date of March 16, states that the following quarantine regulations have been adopted by the local board of health:

1. That vessels from Egypt and Syrian ports, with clean bills of health and no sickness on board, be admitted to pratique after inspection.

2. That vessels from the above named ports with foul or doubtful bills of health shall quit the port of Gibraltar.

MARTINIQUE, WEST INDIES.—Under date of March 12, United States Consul W. H. Garfield gives the following notice concerning yellow fever:

I hereby notify the National Board of Health that several foreign vessels are leaving the island of Martinique, bound to southern ports in the United States, without having bills of health. As we have had lately some cases of yellow fever during the winter, and it is

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 9, 1881—Continued.

Cities and States.	Cromp.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
San Antonio, Tex.	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Waco, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	2	....	2	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....
Galveston, Tex.	....	....	....	....	....	....	....	....	....	....	....	....	1	....	3	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Little Rock, Ark.	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	1	....	....	....	....	....	....	1	2	....	....	....	....	....	....
Nashville, Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	4	....	....	....	....	....	....	1	1	....	....	....	....	....	....
Memphis, Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Clarksville, Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Murfreesboro', Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5	....	....	....	3	1	....	....	....	....	2	....	....	....	....	....
Trenton, Tenn.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Louisville, Ky.	1	....	2	....	2	....	....	....	1	....	....	....	1	....	13	2	4	....	7	....	....	....	4	....	4	....	....	....	1	....
Bowling Green, Ky.	2	....	3	....	2	....	....	....	1	....	....	....	2	....	....	....	2	....	3	....	....	....	....	....	....	....	....	....	....	....
Cincinnati, Ohio.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	1	....	1	....	....	....	....	....
Cleveland, Ohio.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dayton, Ohio.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gallipolis, Ohio.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Portsmouth, Ohio.	2	....	....	....	....	....	....	....	....	....	1	....	....	....	1	3	1	....	....	....	....	....	....	....	1	....	....	....	1	....
Indianapolis, Ind.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Richmond, Ind.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....
Evansville, Ind.	8	....	3	....	4	....	2	....	1	....	1	....	3	....	18	....	1	....	14	....	....	....	....	....	4	....	3	....	....	....
Chicago, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Peoria, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Aurora, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jacksonville, Ill.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Elgin, Ill.	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Moline, Ill.	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....
Rock Island, Ill.	1	....	....	....	....	....	1	....	1	....	....	....	6	....	5	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....
Lake, Ill.	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Milwaukee, Wis.	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Beloit, Wis.	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
East Saginaw, Mich.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Flint, Mich.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lansing, Mich.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
Keokuk, Iowa.	2	....	2	....	....	....	....	....	4	....	7	....	4	....	17	3	....	....	4	....	2	....	1	....	2	....	....	....	....	1
St. Louis, Mo.	1	....	....	2	1	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Kansas City, Mo.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Omaha, Nebr.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lawrence, Kans.	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boulder, Colo.	1	....	....	....	1	....	....	....	....	....	....	....	....	....	5	....	....	....	....	....	....	....	....	....	....	....	3	....	....	....
Salt Lake City, Utah.	....	....	....	....	....	....	1	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
San Francisco, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Vallejo, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Los Angeles, Cal.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	74	3	46	5	123	3	23	....	69	3	28	1	137	9	318	47	28	1	102	6	18	1	33	4	43	1	59	2	14	2

probable that the disease will appear again during the summer, I give notice of the fact that measures may be taken to prevent the introduction of the fever into the United States.

MATANZAS, MEXICO.—Under date of April 12, United States Consul G. W. Roosevelt states that a seaman of the American brig *Atlas*, of Bucksport, Maine, was brought on shore April 6 and placed in a private hospital, where he died the next day from small-pox. The *Atlas* cleared April 12 for Philadelphia, taking a clean bill of health, as there was no sickness on board. A few cases of small-pox now exist in Matanzas.

RIGA, RUSSIA.—United States Consul P. Bornholdt reports for the month of January 414 births and 325 deaths in a population of 130,000. Annual birth-rate 37.5 per 1,000; annual death-rate 28.5.

SINGAPORE.—United States Consul A. G. Studer reports his district free from contagious or infectious diseases up to March 7.

The following reports for the week ending April 9, 1881, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 27; under 5 years, 14; cerebro-spinal meningitis 1, consumption 4, diphtheria 2, typhoid fever 2, scarlet fever 4, pneumonia 1, bronchitis 1. Bath, Me., 8,000; deaths, 5; consumption 1, croup 1, congestion of lungs 1. Belfast, Me., 5,308; consumption 1. Bucyrus, Ohio, 3,950; deaths, 2; under 5 years, 2; measles 2. Calais, Me., 6,172; deaths, 3; under 5 years, 2; congestion of lungs 2. Carrollton, Miss., 600; death, 1. Chillicothe, Ohio, 11,000; deaths, 4; under 5 years, 1; consumption 1. Clinton, Mich., 1,200; no deaths. Columbus, Ga., 10,000; deaths, 3; under five years, 1; pneumonia 1. Corinth, Miss., 2,264; death, 1. Crystal Springs, Miss., 955; death, 1. Dallas, Tex., 10,327; deaths, 5; under 5 years, 1; consumption 3, malarial fever 1, pneumonia 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Franklin, Tenn., 2,466; death, 1. Gunn City, Mo., 150; no deaths. Helena, Mont., 3,630; deaths, 4; under 5 years, 1; pneumonia 1. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; death, 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,250; death, 1. Kenosha, Wis., 5,500; death, 1; diphtheria, 1. Madison, Ind., 9,009; deaths, 7; under 5 years, 3; cerebro-spinal meningitis 1, consumption 1, pneumonia 1, congestion of lungs 1. Martinsburg, W. Va., 6,334; deaths, 1; consumption 1. Meridian, Miss., 4,013; deaths, 2; cerebro-spinal meningitis 1. Milan, Tenn., 1,800; deaths, 2; consumption 1. Milledgeville, Ga., 3,000; no deaths. Muscatine, Iowa, 8,412; death, 1; small-pox 1. Muskegon, Mich., 11,300; deaths, 6; under 5 years, 1; consumption 1, malarial fever 1, pneumonia 2, congestion of lungs 1, puerperal 1. Niles, Mich., 4,200; death, 1. Painesville, Ohio, 5,604; death, 1. Pass Christian, Miss., 2,000; deaths, 2; consumption 1. Pearlington, Miss., 1,200; death, 1; typhoid fever 1. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; death, 1. Port Royal, S. C., 750; death, 1 Rensselaer, Ind., 900; no deaths. Senatobia, Miss., 935; no deaths. Springfield, Ohio, 21,000; deaths, 10; under 5 years, 8; consumption 1, croup 3, pneumonia 2. Starkville, Miss., 1,454; death, 1; puerperal 1. Tampa, Fla., 740; death, 1. Titusville, Pa., 9,046; no deaths. Tuscaloosa, Ala., 2,000; no deaths. Verona, Miss., 1,000; no deaths. Winchester, Va., 5,000; no deaths. Winona, Minn., 10,000; deaths, 2; measles 1, puerperal 1. Youngstown, Ohio, 15,421; deaths, 5; under 5 years, 1; cerebro-spinal meningitis 1, typhoid fever 1, scarlet fever 1. Total population, 284,693; deaths under 5 years, 36; total number of deaths, 105; annual rate per 1,000, 19.2.

REPORTS OF CORRESPONDENTS.

BURLINGTON, VT., April 11.—Dr. George M. Ockford reports that during the past month the general health of the city has been very good. Scarlet fever has existed for several months, but the cases are few and of mild type. Some cases of whooping-cough have also been observed. These diseases occur chiefly among the poorer classes, many of whom live in over-crowded houses or in damp and unwholesome cellars.

HAVANA, CUBA.—During the week ending April 8 there were 32 deaths from small-pox and 21 from typhoid fever. None from yellow fever were reported.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	Apr. 2	1	11.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
Cuba	Havana	195,437	Apr. 2	179	47.8	.....	.....	.....	2	.....	30	.....	7	.....	.....	.....	.....	72
Mexico	Matamoras	16,000	Apr. 2	12	39.1	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....
Do	Vera Cruz	20,000	Mar. 27	20	52.8	.....	.....	.....	4	.....	1	.....	.....	.....	.....	.....	.....	79
Do	Acapulco	3,500	Mar. 13	8	119.2	.....	.....	.....	.....	24	6	.....	.....	.....	.....	.....	.....	85
Do	...do	3,500	Mar. 20	13	193.8	.....	.....	.....	.....	22	5	.....	.....	.....	.....	.....	.....	86
Do	...do	3,500	Mar. 27	17	253.5	.....	.....	.....	.....	21	7	.....	.....	.....	.....	.....	.....	86
Do	Matamoras	16,000	Apr. 10	13	42.4	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....
Teneriffe	Santa Cruz	16,610	Mar. 12	7	22.0	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	68.2
Do	...do	16,610	Mar. 19	12	37.7	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	68.3
Canary Islands	Las Palmas	18,000	Mar. 12	29	83.8	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Ireland	Queenstown	10,000	Apr. 2	3	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	174,000	Apr. 2	106	31.6	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Do	Dublin	333,401	Apr. 2	197	30.1	.....	.....	.....	.....	.....	1	.....	1	.....	4	.....	7	35.2
Scotland	Dundee	155,100	Mar. 26	66	22.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
Do	Leith	59,958	Apr. 2	22	19.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	36.6
England	London	3,707,130	Mar. 26	1,516	21.3	.....	.....	.....	.....	.....	49	.....	11	.....	2	.....	116	39.5
Do	Liverpool	549,834	Apr. 2	260	24.6	.....	.....	.....	.....	.....	.....	3	2	29	3	18	22	37.2
Do	Bradford	197,196	Mar. 26	80	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....
Do	Tunstall	27,775	Apr. 2	20	37.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	44.4
Wales	Cardiff	83,389	Apr. 2	36	22.4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	38.6
France	Paris	1,988,806	Apr. 2	1,245	32.3	.....	.....	.....	.....	.....	27	.....	45	.....	.....	.....	113	.....
Do	Rouen	104,209	Apr. 2	63	31.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Geneva	50,066	Mar. 5	14	14.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	50,066	Mar. 12	14	14.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Do	...do	50,066	Mar. 19	10	10.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	50,066	Mar. 26	15	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	Mar. 26	197	32.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	5	42
Do	Rotterdam	152,515	Mar. 26	88	30.0	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	31	.....	.....
Do	...do	152,515	Apr. 2	101	34.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	5	.....
Germany	Berlin	1,123,571	Mar. 19	499	23.1	.....	.....	.....	.....	4	4	14	1	1	.....	147	68	37.6
Do	Barmen	95,000	Mar. 19	35	19.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	49.8
Do	...do	95,000	Mar. 26	34	19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	43.8
Do	Breslau	273,000	Mar. 19	217	41.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	31	33.8
Do	Bremen	112,200	Mar. 19	50	23.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....
Do	Cologne	144,751	Mar. 26	70	25.1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	4	.....
Do	Mannheim	53,500	Apr. 2	14	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.0
Do	Hamburg	400,000	Mar. 12	223	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	4	.....
Bavaria	Munich	230,000	Mar. 26	175	39.7	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	22	.....
Belgium	Brussels	406,638	Mar. 26	198	25.3	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	7	.....
Saxony	Chemnitz	95,135	Mar. 19	48	26.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	37
Do	Dresden	220,216	Mar. 19	110	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	14	37.5
Do	Leipsic	151,616	Mar. 26	62	21.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	37.5
Denmark	Copenhagen	235,254	Mar. 9	116	25.8	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	18	.....	34.7
Do	...do	235,254	Mar. 16	80	17.8	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	7	.....	34
Italy	Venice	141,615	Jan. 29	97	35.5	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	5	28
Do	...do	141,615	Feb. 5	99	36.2	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	8	41
Do	...do	141,615	Feb. 12	61	22.5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	38
Do	...do	141,615	Feb. 19	61	22.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	37
Do	...do	141,615	Feb. 26	67	24.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	8	41
Do	...do	141,615	Mar. 5	69	25.5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	42
Do	...do	141,615	Mar. 12	84	31.0	.....	.....	.....	.....	.....	6	.....	2	.....	.....	.....	6	50
Do	...do	141,615	Mar. 19	71	26.2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	2	44
Do	Genoa	185,000	Apr. 2	89	25.1	.....	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	53.6
Austria	Vienna	731,191	Mar. 26	474	29.6	.....	.....	.....	.....	.....	24	.....	4	.....	.....	.....	13	44.2
Do	Trieste	128,295	Mar. 5	102	41.5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	4	.....
Roumania	Bucharest	177,646	Mar. 26	127	37.3	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	5	.....
Hungary	Buda-Pesth	370,037	Mar. 19	217	30.6	.....	.....	.....	.....	.....	5	.....	4	.....	.....	.....	8	.....
Russian Poland	Warsaw	379,763	Mar. 19	157	21.6	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	30.5
Norway	Christiania	120,000	Mar. 19	54	23.4	.....	.....	.....	.....	2	.....	3	1	.....	.....	11	6	33
Sweden	Stockholm	169,429	Mar. 19	90	28.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	36.5
Spain	Malaga	115,882	Mar. 27	70	31.5	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	68.4
Morocco	Tangier	15,000	Jan. 22	7	24.3	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	7	54
Do	...do	15,000	Jan. 29	10	34.8	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	55
Do	...do	15,000	Feb. 5	6	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	15,000	Feb. 12	6	20.9	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	59
Do	...do	15,000	Feb. 19	5	17.3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	58
Do	...do	15,000	Feb. 26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
Do	...do	15,000	Mar. 5	5	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
Do	...do	15,000	Mar. 12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
Do	...do	15,000	Mar. 19	3	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
Cape Colony	Cape Town	35,000	Mar. 14	42	62.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
Egypt	Alexandria	220,000	Mar. 26	147	34.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British India	Calcutta	429,535	Mar. 5	257	31.2	.....	40	.....	.....	.....	8	.....	20	.....	.....	.....	4	73.4
Do	Bombay	644,500	Mar. 1	420	32.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	644,500	Mar. 8	389	30.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
China	Shanghai	2,197	Feb. 15	1	26.1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	40.6
Do	...do	2,197	Feb. 22	1	26.1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	42
Do	...do	2,197	Mar. 2	1	26.1	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	1	49
Japan	Kobe	19,248	Feb. 26	12	32.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	19,248	Mar. 5	11	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	...do	19,248	Mar. 12	5	13.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

HAVANA, CUBA.—During the week ending April 15 there were 26 deaths from small-pox and only one from yellow fever. Typhoid fever caused 29 deaths, chiefly among the natives, and the victims were mostly under 20 years of age. The physicians differ as to the true character of this so-called "typhoid fever."

VERONA, MISS.—Dr. R. C. Cunningham, health officer of Lee County, Miss., reports under date of April 9 that efforts are to be made in that county to procure the passage of an act of legislature making vaccination a pre-requisite to attendance at the public schools. Precautions are now taken against the introduction of small-pox into the county from Texas or elsewhere.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, APRIL 30, 1881. [No. 44.

SPECIAL REPORT TO NATIONAL BOARD OF HEALTH.

A fatal form of septicæmia in the rabbit, produced by the subcutaneous injection of human saliva. An experimental research [by GEO. M. STERNBERG, Surgeon U. S. Army].

In a report (not yet published) made to the National Board of Health in February last, I have given a detailed account of certain experiments, made in the first instance as a check upon experiments relating to the so-called *Bacillus malariæ* of Klebs & Tomassi-Crudelli, which show that my own saliva has remarkable virulent properties when injected into the subcutaneous connective tissue of a rabbit. Further experiments, made in the biological laboratory of the Johns Hopkins University, have fully confirmed the results heretofore obtained, and the object of the present report is to place upon record these last experiments, which are of special interest just now because of the announcement by Pasteur of "*a new disease*," produced in rabbits by the subcutaneous injection of the saliva of an infant which died of hydrophobia in one of the hospitals of Paris. (Comptes Rendus Ac. d. sc. 1881, xcii, p. 159.)

I have demonstrated by repeated experiments—

That my saliva in doses of 1.25 *c. c.*[3] *to* 1.75 *c. c.*[3] (*see note* 1) *injected into the subcutaneous connective tissue of a rabbit, infallibly produces death within forty-eight hours.*

I have commonly injected an amount varying from 5 to 25 minims, according to the size of the animal, but in small rabbits have had a fatal result in three cases out of five follow the injection of 1 minim diluted with 5 minims of water.

Query. Do similar results follow the injection of other fluids containing organic matter in suspension or solution?

Answer. One c. c.[3] of my own blood failed to kill a rabbit; 1 c. c.[3] of putrid wine containing *B. termo* in abundance failed to kill a small rabbit; 1 c. c.[3] (each) of liquid fæces and distilled water (1 to 10) failed to kill two rabbits; 1.25 c. c.[3] of bouillon undergoing putrefaction and loaded with *B. termo* failed to kill a rabbit; 1 c. c.[3] of sediment from Baltimore water, consisting of organic *débris* and organisms—chiefly *Bacillus subtilis*, *Leptothrix pusilla*, *Protococcus*, and a few diatoms and flagellate monads—failed to kill a rabbit. (Note 1.)

On the other hand, injections of a small quantity of surface mud from the gutters of New Orleans during the month of September, 1880, invariably produced fatal results within forty-eight hours. (See unpublished report above referred to.)

NOTE 1.—Coze and Feltz found, as the result of numerous experiments, that the blood of healthy persons and that of persons sick with non-infectious maladies does not produce fatal results when injected into the subcutaneous tissues of rabbits (Clinical and Exp. Researches upon Infectious Maladies, 8°, Paris, 1872). Pasteur also has inoculated, without result, the saliva of asphyxiated rabbits and of men dead with common diseases (*l. c.*).

Query. Does the saliva of other individuals injected in the same manner produce similar results?

Answer. The saliva of four students, residents of Baltimore (in March), gave negative results; eleven rabbits injected with the saliva of six individuals in Philadelphia (in January) gave eight deaths and three negative results; but in the fatal cases a less degree of virulence was shown in six cases by a more prolonged period between the date of injection and the date of death. This was three days in one, four days in four, and seven days in one.

Query. Is there any recognizable peculiarity in the saliva which exhibits the greatest degree of virulence?

Answer. In the case of Dr. S., whose saliva shows an exceptional virulence, the teeth are sound, the secretions of the mouth normal in physical properties and reaction, and the general health good. There is perhaps an unusual flow of saliva, but no other noticeable peculiarity.

Query. Is there any plausible hypothesis by which this difference in virulence can be explained?

Answer. This question will require for its solution more extended experiments. In the mean time it may be mentioned, as having a possible bearing upon the subject, that Dr. S. has been engaged to a considerable extent, during the past two years, in studies which have brought him in contact with septic material. Dr. F., of Philadelphia, whose saliva killed (after a longer interval) two rabbits, is pathologist to a large hospital, and consequently is constantly brought in contact with septic material. Mr. N. and Mr. B., whose saliva killed all the rabbits operated upon (four), are residents of seaport towns in Cuba. (See Note 2.)

NOTE 2.—The possibility that this septic condition of the secretions of the mouth may bear some relation to the protection which these Cubans and myself enjoy against yellow fever, which is a disease presenting many points of resemblance to septicæmia, has occurred to me, and without at present laying any great stress upon this possibility I think it worthy of further experimental consideration.

Query. Is death produced in other animals by the subcutaneous injection of human saliva which is virulent for rabbits?

Answer. Injection of 4 c. c. into each of two small dogs produced local abscesses at point of injection, but no other noticeable result. (See Note 3.) Injection of 0.25 to c. c. into five chickens produced no result. Injection of 0.75 c. c. (each) into three guinea-pigs proved fatal to two—one in three and one in seven days. Injection of 0.5 c.c. into five rats resulted fatally to one only. (See Note 4.)

NOTE 3.—A dog succumbed, however, to an injection of 1 cm[3] of serum from the subcutaneous cellular tissue of a rabbit recently dead.

NOTE 4.—The results obtained by me in these experiments correspond with those reported by Pasteur in the paper already referred to, viz, guinea-pig, less susceptible than rabbit, complete immunity of the chickens, and susceptibility of the dog to the "new disease" as the result of injections of blood from dead rabbits.

Query. What is the nature of the fatal malady produced in rabbits by the subcutaneous injection of the saliva of certain individuals?

Answer. The course of the disease and the post-mortem appearances indicate that it is a form of *septicæmia*. Immediately after the injection there is a rise of temperature which in a few hours may reach 2° to 3° centigrade (3.6° to 5.4° Fah.); the temperature subsequently falls, and shortly before death is often several degrees below the normal. There is loss of appetite and marked debility after twenty-four hours, and the animal commonly dies during the second night or early in the morning of the second day after the injection. Death results still more quickly when the blood, &c., from a rabbit recently dead is injected. Not infrequently convulsions immediately precede death.

The date and mode of death corresponds with that reported by Pasteur in the mémoir referred to. Two rabbits injected with buccal mucus from the mouth of a child recently dead with hydrophobia December 11 were found dead December 13. Other rabbits inoculated with the blood and saliva of these died in still less time. Inoculations with fresh blood usually produced death in less than twenty-four hours.

The most marked pathological appearance is a diffuse inflammatory œdema or cellulitis, extending in all directions from the point of injection, but especially to the dependent portions of the body. Occasionally there is a little pus near the puncture, but usually death occurs before the cellulitis reaches the point of producing pus. The subcutaneous connective tissue contains a quantity of bloody serum, which possesses virulent properties, and which contains a multitude of micrococci. There is usually more or less inflammatory adhesion of the integument to the subjacent tissues. The liver is sometimes dark-colored and gorged with blood, but more frequently is of a lighter color than normal, and contains much fat. The spleen is either normal in appearance or enlarged and dark-colored. Changes in this organ are more marked in those cases which are of the longest duration. In certain cases dark-colored pigment has been found in the spleen resembling that which has been supposed to be characteristic of malarial fever. The blood is dark-colored, usually fluid, and there is a tendency to agglutination of the red corpuscles.

The blood commonly contains an immense number of micrococci, usually joined in pairs and having a diameter of about 0.5 μ. These are found in blood drawn from superficial veins, from arteries, and from the cavities of the heart immediately after death, and in a few cases their presence has been verified during life; observations thus far made indicate, however, that it is only during the last hours of life that these parasites multiply in the circulating fluid, and in a certain proportion of the cases a careful search has failed to reveal their presence in post-mortem examinations made immediately upon the death of the animal. This organism, however, is invariably found in great abundance in the serum which exudes in considerable quantities from the œdematous connective tissue when an incision is made through the integument over any point involved in the inflammatory œdema extending from the original puncture.

A perusal of the paper of Pasteur, already referred to, has induced me to pay special attention in three recent post mortems to some points to which this author refers, which I had not noticed in previous examinations, viz, to the condition of the trachea, the lungs, and the lymphatic glands in the groins and axillæ.

Pasteur says, "The cellular tissue is almost always emphysematous." (This

has not been observed to be the case, except to a slight extent in one instance in the rabbits operated upon by me.) "The lungs are frequently filled with *noyaux* of pulmonary apoplexy." (I have found this to be the case in one out of three rabbits examined since my attention has been directed to this point.) "A character more constant than the last (not more constant, however, than that which relates to the volume and color of the *ganglions*) is the state of the trachea, which is almost invariably red, congested, with little hemorrhages from the smallest vessels." (I have found a marked congestion of the vessels of the trachea in the three cases in which I have examined it, and in one case the lymphatic glands of the axillæ were enlarged and congested.)

Query. What constituent of the saliva injected produces the fatal malady in question?

Answer. The following facts demonstrate that *the phenomena detailed result from the presence of a living organism found in the saliva—a micrococcus—which multiplies abundantly in the subcutaneous connective tissue, and also in the blood shortly before or after death.*

(*a*) *The poison is particulate.* This is proved by numerous filtration experiments. *Example:* March 15, 11 a. m. Injected 1 c. c.[3] of filtered saliva (filtered through thin stratum of plaster of Paris by means of Sprengel's pump) into left flank of rabbit weighing 1 pound, and at the same time one-fourth the quantity of unfiltered saliva into a rabbit of the same size. No harm resulted to the first rabbit, while the second died the following day at 5.30 p. m.

(*b*) *The virulence of the saliva is destroyed by boiling.*

(*c*) *The saliva loses its virulence when kept for twenty-four hours in a culture chamber at a temperature of* 37° *centigrade.*

NOTE.—The presence of *B. termo* and an odor of putrefaction in saliva kept for twenty-four hours in a culture chamber shows that changes are occurring which have heretofore been recognized as destructive of the septic poison (organism), *e. g.*, the virulence of the poison which produces dangerous dissection wounds is lost when putrefaction changes set in.

(*d*) *The addition of one part of a* 10 *per cent. solution of carbolic acid to two parts of saliva destroys its virulence.*

(*e*) *The effused serum from the subcutaneous connective tissue of a rabbit recently dead produces death attended with the same phenomena as resulted from the injection of the saliva in the first instance.* But this does not contain epithelial cells or salivary corpuscles, and we are, therefore, justified in excluding these as possible agents in the production of the results indicated. Moreover, these are present at all times in the saliva of all individuals, while virulence, at least such an intense degree of virulence, is an exceptional property of human saliva.

(*f*) *This serum loses its virulence by filtration.*

Unfiltered serum from a recently dead rabbit has invariably proved fatal in smaller quantity and in less time than is required by the saliva in the first instance, showing an increase of virulence as the result of successive cultivation of the organism in the body of a susceptible animal. This corresponds with the results obtained by Davaine, Koch, Pasteur, and others. I have not attempted to ascertain the minimum quantity which will produce death. Davaine says, "A rabbit may be killed by the $\frac{1}{1000}$ part of a drop of septic blood." (Bull. de l'Acad. de Med., 2 s., t. viii, p. 121.) In my filtration experiments I injected, however, quantities far in excess of the amount required to produce speedy death if unfiltered serum had been employed.

Example: March 14. Injected 2 cm[3] of filtered serum (from subcutaneous connective tissue of rabbit recently dead) diluted with distilled water (1 to 20) without result, while one-quarter the quantity (5 cm[3]) of the same dilution *unfiltered*, injected at the same time into another rabbit, produced death in twenty-four hours.

(*g*) *The micrococcus present in the serum from the connective tissue of a rabbit which has succumbed to a subcutaneous injection of saliva, may be cultivated in bouillion made from the flesh of a healthy rabbit, or in blood serum obtained from a healthy dog, and these fluids thereby acquire a virulence which they did not have before.*

My first efforts to cultivate the micrococcus in urine, in gelatine solution, and in bouillon made from the flesh of a dog, all proved ineffectual, and these fluids after inoculation with blood or serum from the connective tissue, showed a temporary virulence only, which was doubtless due to the presence of the micrococci introduced, which preserved their vitality for a certain time, although the conditions were not favorable for their increase. After a few days the first culture lost its virulence and successive inoculations gave negative results, both as to the presence of the micrococcus and as to noxious properties when injected into rabbits.

(*h*) *Successive cultures in which but a small drop is taken each time to inoculate a fresh quantity of bouillon exclude the white and red blood-corpuscles* (filtration experiments have already shown the poison to be particulate) *as possible agents in the production of this virulence and prove conclusively that the veritable cause is the presence of a micrococcus,* found first in the saliva, then in the serum from the connective tissue and (usually) in the blood of the animal killed by the injection of saliva, and finally in each successive culture fluid inoculated (in the first instance) with a small quantity of this serum or blood.

Within a few hours after inoculating sterilized bouillon made from the flesh of a rabbit (first tested for several days in a culture oven at a temperature of 37° cent.) with blood, or serum from subcutaneous connective tissue of a rabbit recently dead, the fluid—previously transparent—becomes opalescent, and upon microscopical examination is found to contain innumerable micrococci, solitary, in pairs (Fig. 8), and in torula chains. The same result follows upon inoculating a second portion with a minute drop from the first, and so on. The continued virulence of these successive cultures I have amply proved.

Example: April 13. Injected 1 cm[3] of bouillon culture, No. 6 (six successive inoculations, the first with serum from subcutaneous connective tissue of rabbit), into left flank of a large rabbit. *Result:* The animal was found dead on the morning of the 16th, and presented the usual appearances upon *post-mortem* examination. Its blood and the effused serum in subcutaneous connective tissue contained, as usual, an immense number of micrococci, like those already described.

Query. Does the micrococcus found under the circumstances detailed differ from the *Micrococcus septicus* of Cohn, and is it identical with the organism described by Pasteur as present in the blood of rabbits killed by the subcutaneous injection of the saliva of an infant dead from hydrophobia (l. c.)?

Answer. Cohn describes the *M. septicus* as follows:

Little rounded cells, of 0.5 μ, motionless and crowded in masses, or united in chaplets in the secretion of wounds in cases of septicæmia (Klebs), in zooglœa in callous ulcers, in isolated cells, united *in pairs*, or in chaplets in the serum *of epidemic puerperal fever* (Waldyer), in all the tissues, vessels etc., in cases of pyæmia and septicæmia. (The Bacteria Magnin, Little, Brown & Co., Boston, 1880, p. 76.)

Pasteur gives the following description of the micrococcus found by him in the fatal disease described by him as new, and which he evidently does not consider identical with septicæmia, a disease which he had previously studied experimentally. It should be noticed, however, that Pasteur recognizes several forms of septicæmia. Thus he says:

And now we see why septicæmia has so often been confounded with charbon; their causes are of the same order; it is a vibrio which causes septicæmia and a bacillus which produces charbon. * * * Septicæmia and putrefaction in a living being are not the same thing. *There are as many different septicæmias as there are different vibrios.* * * * In septicæmia the vibrios do not appear in the blood until the last thing, but in this liquid one of them takes a peculiar aspect, often longer than the diameter of the field of the microscope, and so transparent that it easily escapes observation; when, however, it is once perceived it is easily found again, flexible, climbing and removing the blood globules as a serpent moves the grass in the bushes, etc. (Charbon and septicæmia, C. R. Ac. des Sc., lxxxv, 101–115.)

This septic vibrio of Pasteur I found in the blood of rabbits, victims of my experiments, in New Orleans during the past summer (Report to National Board of Health, not yet published), but have not since met with it; perhaps because it develops *post mortem* and requires the hot weather of summer for its development. Whether it is an independent organism or is developed under special conditions from the *Micrococcus septicus*, being an advanced phase in the development of this organism corresponding with the spore-producing filaments which have been shown to constitute one phase in the life-history of *Bacillus anthracis* (Koch) and of *Bacterium termo* (Ewart), is an interesting question for further research. The vivid language of Pasteur describes it well, and the wonderful vigor with which this extremely slender and almost transparent organism thrusts aside the blood corpuscles in its impetuous serpentine movements cannot fail to astonish the observer. The micrococcus of Pasteur's "new disease" is, on the contrary, quite motionless, and is described as follows:

This organism is sometimes so small that it may escape a superficial observation. Its form does not differ from that of many other microscopic beings. It is an extremely short rod a little compressed towards the middle, resembling a figure 8, and of which the diameter of each half often does not exceed a half a thousandth of a millimeter [=0.5μ and corresponding with the diameter given by Cohn for the *Micrococcus septicus*, also with the micrococcus observed by myself in the form of septicæmia described in this report]. Each of these little particles is surrounded at a certain focus with a sort of aureole which corresponds perhaps to a material substance. (NOTE.—The possibility that this appearance is due to diffraction is considered, but Pasteur inclines to the opinion that in the case in question it is due to a mucous substance which surrounds the organism.)

The foregoing descriptions answer as well for the micrococcus observed by me as if they had been written especially for it, and it is unnecessary for me to say more at present in relation to the morphology of this organism, which apparently is identical with that of the *Micrococcus septicus* of Cohn, and with the organism found by Pasteur in the "new disease" described by him. Does it then follow that the organisms are identical and that the phenomena related by Pasteur as resulting from the subcutaneous injection of saliva from an infant dead of hydrophobia and by myself from the saliva of a healthy adult represent the same disease? By no means. The man of science soon finds that things which look alike are not necessarily of the same kind. Thus of two transparent colorless fluids one may be harmless water and the other a corrosive acid; two embryos apparently alike may develop the one into a man and the other into a monkey; two seeds of the same size and general appearance may produce the one a cabbage, the other a turnip, etc.

The argument, then, that because a certain bacillus, or spirillum, or micrococcus, is morphologically identical with another which is proved to be harmless as to its effects upon an animal organism, consequently *it* must be harmless, has no support from analogy any more than it has from experiment. And it is high time that naturalists and physicians should open their eyes to the fallacy of such an argument, as it not only has a tendency to close the minds of those who receive it to the reception of demonstrated truth, but also acts, to some extent, as a bar to the progress of science in this direction. The argument is: Bacteria are found everywhere, we eat them, we drink them, we draw their germs into our lungs at each inspiration and without apparent injury. They are evidently harmless. Your spirillum of relapsing fever does not differ (the morphological resemblance is admitted) from a harmless spirillum frequently found in the human mouth; your *Bacillus anthracis* does not differ from *Bacillus subtilis*, etc. The answer is plain. The fact that they are harmless bacteria does not disprove the possibility of pathogenic bacteria; the fact that two things look alike does not prove that they are alike; experiment proves conclusively that the phenomena of anthrax are due to the presence and multiplication in the body of the affected animal of the *Bacillus anthracis*, and that in the fatal form of septicæmia described in this report the efficient cause of the morbid phenomena and of death is the minute micrococcus described.

Doubtless, harmless micrococci abound. Pasteur finds no difference, morphologically, between the organism which produces the "new disease" described by him and that which produces the *cholera des poules*. He says: "By the form which it has in the blood the organism resembles the microbe of chicken cholera, but it differs completely in its functions. We may inoculate fowls with it without their experiencing the slightest ill effect." (The same is true of the organism producing the form of septicæmia described in this paper.) "In the form of chaplets it resembles greatly many other organisms which I have often observed," etc.

It will have been noticed from the account already given that the fatal disease in rabbits observed by me and resulting from the subcutaneous injection of my own saliva resembles in many particulars the disease described by Pasteur as new, resulting from the subcutaneous injection of the saliva of a child dead with hydrophobia. Another point of resemblance is the fact that the saliva of one of my rabbits, recently dead, has the same virulence as the blood and serum from connective tissue. A serous liquid, which in some instances escapes from the bowels shortly before or after death, also contains the micrococcus in abundance and possesses like virulence. All of these points of resemblance form a strong probability in favor of the identity of the two diseases, but I am not prepared to pronounce a positive opinion upon this point, especially since Pasteur, who had previously given much attention to the study of septicæmia, pronounces the disease observed by him to be new, while I see no reason, at present, for supposing that the disease observed by me differs essentially from the experimental septicæmia produced by Davaine, Koch, and other investigators, who, however, obtained their first supply of septic organisms from a different source.

In the light of what we already know, it seems very probable that puerperal fever, hospital gangrene, and the various forms of septicæmia known to physicians and surgeons result from the development of pathogenic varieties of harmless and widely-distributed species of micrococci, as the result of especially favorable surroundings, such as are found in the lochial discharges of a puerperal woman or in the secretions from the surface of wounds in a crowded and illy-ventilated hospital ward.

Just as differences in resisting power to experimental septicæmia are exhibited by different species of animals, so doubtless individual differences exist in man, especially as the result of lowered vitality; and this want of resisting power, from whatever cause resulting, must be counted as one of the conditions favorable to the development and propagation of a pathogenic bacterium. Thus we find that in experimental septicæmia the micrococcus does not invade the blood until the vital powers are at a low ebb, and death is near at hand.*

In the dog the vital resistence is competent to withstand the assaults of a micrococcus—injected subcutaneously—having the potency of those found in my saliva, and the result of such an injection is simply a circumscribed abcess. But the increased power (which is perhaps simply a more vigorous and rapid development) gained by cultivation in the body of the rabbit, enables these organisms to overcome the resistence of the dog, and a diffuse cellulitis results of fatal character.

The fact, observed by myself, that during the summer months the mud in the gutters of New Orleans possesses an extraordinary degree of virulence† shows that pathogenic varieties of bacteria are not alone bred in the bodies of living animals. The more I study this subject the more probable it seems to me that in this direction lies the explanation of many problems which have puzzled epidemiologists, and that the sanitarians are right in fighting against filth as a prime factor in the production of epidemics—a factor of which the *rôle* is easily understood, if this view is correct.

The presence of septic organisms, possessing different degrees of virulence depending upon the abundance and kind of pabulum furnished them and upon meterological conditions more or less favorable, constitutes, in my opinion, the *epidemic constitution of the atmosphere*, which wise men were wont to speak of not many years ago as a cloak for ignorance. It must be remembered that the gutter mud of to-day, with its deadly septic organisms, is the dust of to-morrow, which in respiration is deposited upon the mucous membrane of the respiratory passages of those who breathe the air loaded with it. Whether the peculiar poison of each specific disease is of the same nature or not—a question which can only be settled by extended experimental investigations in the future—it is altogether probable that this factor often gives a malignant character to epidemics of diseases which uncomplicated are of a comparatively trivial nature.

NOTICE OF QUARANTINE.

The Department of State has been notified by the United States consul at Aden, Arabia, under date of March 19, that in consequence of the outbreak of plague in Mesopotamia, all vessels arriving at Aden from ports on the Persian Gulf, with clean bills of health, will be subject to a quarantine of seven days.

*By virtue of some property or mechanism at present unknown, blood, which external to the body is a favorable medium for the development of many species of bacteria, resists their entrance or gets rid of them when they effect an entrance, *e. g.*, by injection, so long as it is circulating in the vessels of a healthy individual.

† There is no reason to suppose that this is peculiar to New Orleans, but I have not yet had the opportunity to extend my experiments to other places.

PROPOSED SANITARY LEGISLATION IN CANADA.

The following plan of registration of vital statistics is offered by Thomas H. Monk, esq., of Toronto, Canada:

Outline of a scheme for the registration of the state of health, showing: 1st. The information which it is proposed to obtain; 2d. The method in which it is to be obtained; 3d. How it is to be utilized; 4th. The benefits which will be derived from it. Prepared by Thomas H. Monk, esq., of Toronto, Canada.

1. *The information it is proposed to obtain.*

A.—A statement of the number of cases of each disease coming under the notice of the physician reporting. The form on which this report is made is so arranged that the number of old cases, *i. e.*, of persons who were taken sick *previous* to the week for which the report is made, and their progress is given; as well as the number of new cases, *i. e.*, of persons taken sick *during* the week for which the report is made, and the severity of the disease. The age of the person afflicted will also be given, and it will be stated whether the disease terminated in recovery or death. We shall therefore have here a record of the inception, progress, and termination of every case of disease reported.

B.—An endeavor will be made to accumulate facts regarding the peculiar features of the locality, which will be useful in discussing the above reports, such as the drainage of the locality, the aspect of the towns, cities, and villages, the water supply, the kind of soil and general topographical features of the district, and such other points as may influence the sanitary condition and health of the inhabitants.

2. *The method in which it is to be obtained.*

A.—Forms for reporting every week will be sent to such physicians as express a willingness to co-operate. This form (*a*) will be so arranged that each person reporting will be able to keep a copy of his report. In order to avoid unnecessary trouble in looking through his private books for the purpose of obtaining the information for the report, another form (*b*) will be supplied. It will then be comparatively easy to enter every day the cases which have been attended. This will undoubtedly increase the accuracy of the reports, as there will be no difficulty in entering the *casual* cases of disease which may only come under notice once, and of which, in many instances, no other record would be kept. This form will not be returned to the central office; but is merely a daily blotter for the convenience of the practitioner.

B.—In order to obtain information regarding the topographical and other features of the various localities, the circulars first issued will be accompanied by a form, the return of which, when filled in, will give the data required.

C.—Remarks regarding any change in the sanitary condition, or concerning any special disease, will be noted on the regular weekly form.

3. *How it is to be utilized.*

A review of the reports received will be issued every two weeks, stating the diseases which are most prevalent in the different localities. For this purpose each province will be divided into districts, and special reports will be made for each district. It will also be stated whether the number of cases of the disease has increased or not since the previous report. Special attention will be devoted to pointing out the existence of contagious and infectious diseases, and such information will be given relative to public health as may be considered of service to all interested therein. Copies of this review will be furnished to the minister of agriculture, to the secretary or president of each medical society, to the mayors and health officers of each city, town, or municipality, as well as to every physician reporting. It will not be necessary to wait for the publication of these fortnightly reviews when an epidemic prevails in any locality, as a special report regarding the increase or decrease in the amount of sickness will be forwarded to all interested persons as soon as possible after the receipt of the weekly returns. An annual report will be prepared for the information of the government, which will contain a digest of all the reports received during the year; and disease charts may also be prepared to accompany this report, showing the most prevalent diseases in the different localities. The data contained in the report will also be compared with the meteorological returns, so that the influence of the weather may be investigated.

4: *The benefits which will be derived from it.*

It is obvious that the observations of a single person regarding the prevalence of disease may be wholly at fault. It is only by the accumulated experience of a large number of physicians that we can arrive at correct information on these points. The reports being collected, compiled, and discussed at some central office, and the results published, must prove of great service. It is by no means improbable that the health officers in the cities, towns, and municipalities, on receipt of these reports, will become sufficiently alive to the importance of taking action, wherever and whenever required, for the protection of public health; and it is not unlikely that a spirit of emulation will thus be aroused which will ultimately lead to the most beneficial results. The knowledge that the prevalence of an epi-

demic in their locality has been publicly proclaimed will undoubtedly lead them to take action to prevent its spread, not only for the benefit of humanity, but for their own credit. When the population of each district has been ascertained it will be a comparatively easy task to obtain from these reports the relative proportion of sickness from any disease. This would be most useful in showing the districts in which diseases are more or less than usually prevalent. We shall thus be able to point out to the general public, as well as those interested, the localities which are most free from any special disease; so that persons afflicted with, or predisposed to, diseases such as consumption, rheumatism, malarial and other fevers, &c., may learn in which places there is the greatest likelihood of their recovery, or where they will be removed from those influences which tend to a protraction or increase in severity of such diseases. That this information is desired is shown by the fact that questions have already been asked on this point. The influence of locality in producing or modifying the effects of any special disease is one of the most important features in this investigation.

As the returns state the ages of the persons afflicted with the disease named, we shall have a basis for showing the probability of attack, recovery, or death from the different diseases in the various stages of life. It will be possible to give the proportion between the sickness-rate and the death-rate from the different diseases at certain ages. This will be most important in tracing out the causes of the large mortality among children.

The interchange of such reports with the authorities in the United States will give us a knowledge of the contagious or infectious diseases which may prevail there, and thus enable us to take precautions to prevent their introduction into Canada.

One important result to be attained from the accumulation and discussion of these statistics, will be the knowledge we shall gain of the influence of the weather on health. That the changes of the weather are remarkably connected with the varying death-rate, has been ably shown by Alex. Buchan, secretary of the Scottish Meteorological Society, and Dr. Arthur Mitchell, in their discussion of the mortality of London, England, and New York; but the exact influence they have on the inception and progress of disease has never been satisfactorily ascertained, as we have had no data to go upon. When this influence has been ascertained, our knowledge of the coming weather will be of great service. That some such system of health registration is needed, is shown by the fact that the medical societies in Toronto, Montreal, Hamilton, and London, the only ones before whom the subject has been brought, have unanimously accorded it their support. They all feel the truth of a remark of a distinguished writer on sanitary reform—Right Hon. Lyon Playfair, F. R. S.—that "registration of deaths represents the wrecks which strew the shore, while that of sickness would tell us of coming storms and enable us to trim our vessels to meet them. Till we have such a system of disease-registration, public health cannot be administered with full intelligence."

SKETCH OF FORM A.

List of diseases.	Cases brought forward from last week.	Progress.	New cases.	Severity.	Total number of cases in week.	Terminated in recovery.	Terminated in death.
Asthma..							
Diarrhœa.							
Influenza.							
Laryngitis							
&c., &c.							

List of diseases.	Cases brought forward from last week.	Progress.	New cases.	Severity.	Total number of cases in week.	Age. Under 1.	1 to 5.	5 to 15.	15 to 30.	30 to 60.	Over 60.	Terminated in recovery.	Terminated in death.	Remarks.
Asthma..														
Diarrhœa.														
Influenza.														
Laryngitis														
&c., &c.														

SKETCH OF FORM B.

List of diseases.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Remarks.
Asthma.....								
Brain, inflammation of								
Bronchitis (acute)								
" (chronic) ..								
&c., &c.								

SANITARY LEGISLATION IN ARKANSAS.

Dr. J. A. Dibrell, under date of March 25, 1881, furnishes the following act of the general assembly of the State of Arkansas. The date of the act is not given:

AN ACT TO ESTABLISH A STATE BOARD OF HEALTH.

Be it enacted by the general assembly of the State of Arkansas:

SECTION 1. Within thirty days after the passage of this act the governor shall appoint six State commissioners of health, a majority of whom shall be graduates of legally constituted medical colleges, and of not less than seven years' practice of their profession in the State of Arkansas. The acceptance of an appointment on the State board shall not in any way invalidate or affect the official position of any officer in his local board, and shall not be construed to vacate his office in his local board.

SEC. 2. The said commissioners, so appointed, shall take the oath of office prescribed by the constitution for State officers, and receive from the secretary of state certificates of their appointments. They shall hold their office for two years, unless discharged for good cause. When a vacancy occurs the governor shall fill such vacancy as soon as the fact comes to his knowledge.

SEC. 3. The State board of health shall meet at least once in every three months, and as much oftener as they shall deem necessary. No member of the board except the secretary shall receive any pay, but the actual traveling expenses of the members and officers of said board, while engaged in their duties, shall be allowed and paid out of the appropriation made for its support. They shall elect, annually, one member of the board to be president. They shall also elect, from their number or otherwise, a person of skill and experience in public health duties and sanitary science to be the secretary and executive officer of said board, who shall have all the powers and privileges of a member of the board, except in regard to voting upon matters relating to his own office and duties as secretary, and he shall hold said office for two years. But he may be removed for cause, after a full hearing by the board, a majority of members voting therefor.

SEC. 4. The State board of health may adopt by-laws regulating the transactions of its business, and provide therein for the appointment of committees, to whom it shall delegate authority and power for the work committed to them, and it may also adopt and use an official seal. Four members may constitute a quorum for the transaction of business.

SEC. 5. The secretary shall keep a record of the acts and proceedings of the board, perform and superintend the work prescribed in this act, and such other duties as the board may order.

SEC. 6. Said board shall take cognizance of the interests of health and life among the people of the State. They shall make inquiries in respect to the causes of disease, and especially epidemics, and investigate the sources of mortality and the effects of localities, employments, and other conditions upon the public health. It shall be the duty of said board to obtain, collect, and preserve such information relating to deaths, diseases, and health as may be useful in the discharge of its duties, and contribute to the promotion of the health or the security of life in the State. And it shall be the duty of all health officers and boards of health in the State to communicate to said State board of health copies of all their reports and publications, also such sanitary information as may be useful.

SEC. 7. It shall be the duty of the State board of health to have the general supervision of the State system of registration of births, marriages, and deaths, and also the registration of prevalent diseases. Said board shall prepare the necessary methods and forms for obtaining and preserving such records, and to insure the faithful registration of the same in the several counties. The said board of health shall recommend such forms and amendments of law as shall be deemed to be necessary for the thorough organization and efficiency of the registration of vital statistics throughout the State. The secretary of said board of health shall be the superintendent of registration of vital statistics of the State, as supervised by the said board. The clerical duties and safe keeping of the bureau of vital statistics thus created shall be provided for by the secretary of state, who shall also provide and furnish such apartment and stationery as said board shall require in the discharge of its duties. And the State board of health shall also prepare the necessary methods and forms, and prescribe the rules regulating the issue and use of transfer permits, with the proper coupons attached thereto, to be issued by local organized boards of health, for the transportation of the dead bodies of persons which are to be carried for burial beyond the limits of the counties where the death occurred, and in all cases the said State board of health shall require coupons to be attached to such permits, to be detached and preserved by every common carrier, or the person in charge of any vessel, railroad train, or vehicle to whom such dead bodies shall be delivered for transportion. Any violation of such rules and regulations shall be a misdemeanor.

SEC. 8. At any time the governor of the State may require the State board of health to examine into nuisances or questions affecting the security of life and health in any locality, and in such case the said board shall have all necessary powers to make such examinations, and it shall report the results thereof to the governor within the limits of the time which he shall prescribe for such examination

and report. The report of such examination, when approved by the governor, shall be filed in the office of the secretary of state, and the governor may, in relation to the matters or things found and certified by the State board of health to be a nuisance, declare them to be nuisances, and order them to be changed as he shall direct, or abated and removed. Any violation of such an order shall be held and punished as a misdemeanor, and thereafter the governor may by his order in writing, certified under his official seal, directed to the officers of the county in which the said nuisance shall be situated, require the district attorney, the sheriff, and other officers of every such county to take all necessary measures to execute and have obeyed the order of the governor.

SEC. 9. At any time, at the request of the State board of health, or whenever the governor shall, as heretofore provided, have directed an examination and report to be made by the State board of health into any alleged nuisance, any board of health of any city of the State may appoint and select any one of its officers as its representative during such examination of any nuisance, and such representative officer shall have a seat at and be entitled to take part in all the deliberations of the State board of health during such investigation, but without the right to vote.

SEC. 10. Said board may, from time to time, engage suitable persons to render sanitary service and to make or supervise practical and scientific investigations and examinations requiring expert skill, and to prepare plans and report relative thereto. And it is hereby made the duty of all officers and agents having the control, charge, or custody of any public structure, work, ground, or erection, or of any plan, description, outlines, drawings, or charts thereof, or relating thereto, made, kept, or controlled under any public authority, to permit and facilitate the examination and inspection; and the making of copies of the same by any officer or person by said board authorized, and the members of said board, and such other officers or persons as may at any time be by said board authorized, may, without fee or hindrance, enter, examine, and survey all grounds, erections, vehicles, structures, apartments, buildings, and plans whereby the public health may be promoted, or in any wise preserved.

SEC. 11. It shall be the duty of said board, on or before the first of December in each year, to make a report in writing to the governor of the State upon the vital statistics and the sanitary condition and prosperity of the State; and such report shall set forth the action of said board and its officers and agents, and the names thereof for the past year, and may contain other useful information, and shall suggest any further or additional legislation, action, or precautions deemed proper for the public health, or for the better protection of life and health. And the annual report of said board shall also contain a detailed statement of all money paid out by or on account of said board, and a detailed statement of the manner of its expenditure during the year last past.

SEC. 12. The salary of the secretary of the board of health shall be, per annum, one thousand dollars, to be paid out of the amount hereinafter provided for the same and for the maintenance of said board of health.

SEC. 13. And that the sum of three thousand dollars be, and the same is hereby, appropriated for the payment of the salary of the secretary of the board of health and the expenses incident to the proper working of said board of health.

SEC. 14. And that this act take effect and be in force from and after its passage.

THE ORIGIN AND GROWTH OF THE QUARANTINE SYSTEMS OF THE UNITED STATES.

By STEPHEN SMITH, A. M., M. D., of New York.

MASSACHUSETTS.*

From the settlement of Boston in the year 1630, until the year 1647 (though frequent orders were passed by the "townsmen," regulating the internal health of the town), no measures were taken either by the government of Boston, or general court of the colony, to prohibit vessels from landing, having cases of infectious sickness on board, or coming from infected ports.

Information having reached the colony of Massachusetts Bay that the "plague, or like grievous infectious disease," had "raged exceedingly in the Barbadoes, and other islands of the West Indies," and the colony trading with them at the same time, it was considered highly expedient to enforce some measures to prevent the introduction of a disease so fatal in character. Accordingly the general court, in March, 1647 or 1648, passed their first order regulating quarantine of vessels from the aforesaid ports. This order (a copy of which is appended) was temporary in character, and repealed in about one year afterwards, probably on the termination of the epidemic.

*For a collection of the acts relating to the establishment of quarantine of Massachusetts, from the settlement of the colony of Massachusetts Bay to the present time, we are indebted to Dr. Samuel H. Durgin, M. D., George F. Babbitt, and James F. Keith, commissioners of health. Their report is prefaced by the following note: "The material for the history of quarantine at the port of Boston from the time of its establishment to the present, covering a period of two hundred and thirty-four years, has been so difficult of access, and scattered through so many volumes, that for the sake of convenience of reference and preservation the Board of Health has caused to be copied from the State and city records all that can be found pertaining thereto."

First order of General court, regulating quarantine of vessels passed at a session of the general court the first month (March) 1647 or 1648.

For asmuch as this Co^rte is credibly informed y^t y^e plague, or like grievos in (fectious) disease, hath lately exceed^gly raged in y^e Bardadoes, Christophers, & oth^rs i (slands) in y^e West Indies, to y^e great depopulat^g of those, it is therefore ord^red, y^t all (our own) or oth^r vessels come^g from any pts of y^e West Indies to Boston harbor shall stop (and [*200] come to an) anchor before they come at y^e Castle, und^r y^e poenalty of 100l, & that no pson comeing in any vessell from the West Indies shall go ashore in any towne, village, or farme, or come within foure rods of any oth^r pson, but such as belongs to the vessels company y^t hee or shee came in, or any wayes land or convey any goods brought in any such vessels to any towne, villag^e, or farme aforesaid, or any oth^r place w^thin this iurisdiction, except it be upon some iland where no inhabitant resides, w^thout license from y^e councell, or some three of them, und^r y^e aforesaid poenalty of a hundred pound for ev^ry offence.

That no inhabitant, seaman, or other pson whatsoev^r, reciding w^thin this iurisdiction, shall go a board any such shipp or vessell comeing from the West Indies aforesaid, or buy or otherwise take into his possession any goods or marchandize brought in any such vessell, w^thout license as aforesaid, und^r y^e poenalty of 100l, & to be otherwise confined or restrained, as the said councell, or some three of them, shall appoint; & to y^e end y^t all psons may have due information hereof, it is hereby agreed, y^t this ord^r shalbe forthw^th published, & a coppy thereof sent to y^e Captaine of y^e Castle, togeth^r w^th commission to him to cause ev^ry shipp or other vessell, belonging to y^e country or any oth^r place, y^t shall come from any pt of the West Indies aforesaid, to stop & come to an anchor before they shall passe y^e Castle, & then send unto them a coppy of this order, & there cause them to remaine till furth^r order from y^e Councell, or some three of them, whose counsell is to be taken therein; this ord^r to continue till this Co^rte or the Councell of y^e comon wealth shall see cause to repeal^e y^e same.

It is furth^r ord^red, y^t a coppy of this order shall beforthw^th sent to the sev^rall constables of ev^ry port towne in this iurisdiction, w^th warrant to give notice thereof, w^th all possible speed, to any vessell comeing from y^e West Indies aforesaid, upon y^e first view thereof, and furth^r to see to y^e execution of this ord^r, according to y^e utmost of their ability, & y^t y^e Councell, or some three of them, shall have pow^r to appoint some convenient place, upon some of y^e ilands or other fit places, where such psons & goods shalbe sheltered for a time, & to do any thing of like nature y^t shall be necessary for their preservation, and welfare of y^e country.

This order was repealed on 2d May, 1649, as follows:

"The Courte doth thinke meete that the order concerning the stoping of West India ships at the Castle should hereby be repealed, seeing it hath pleased God to stay the sicknes there."

After the repeal of the order in the year 1649, no quarantine was imposed on vessels until 1665. This year ushered in what is popularly known as the great plague in London, or scientifically as typhus fever. Its ravages had been great, and owing to the commercial intercourse between England and the Colony of Massachusetts Bay, it was deemed necessary to place restriction on vessels coming therefrom. Accordingly the following order from the General Court, held at Boston, was passed the 11th of October, 1665. It was intended, like the first order, to be of a temporary character, and was repealed on the 9th of October, 1667. In both cases, the quarantine grounds were adjacent to the Castle, and permission to land either passengers or goods had to be obtained from the governor or council.

11 October [*554.]

Att the Sessions of the Generall Court held at Boston, 11^th of October, 1665.

. . . . . .

Itt is ordered, that a warrant forthwith issued out from this Court to M^r. W^m. Foster, that he land no goods nor persons till this Court take ffurther order, or that he receive order from the Gou^no^r & majo^r generall, or Deputy Gou^no^r & M^r. Russell; nor shall any person whatsoeuer goe on board him or any such vessell w^thout suchlike licence, on pœnalty of Imprison ment, that so the d^anger of the pæstince may be prevented as much as maybe; & that the captaine of the Castle stop all vessells coming from England, and bring them to an anchor, till they, as aforesajd, shall give order for their coming vp & landing of their goods, that so wee may be found in all due wayes subservient to Providence for the preventing infection by the pestilence. Warrants issued out accordingly to y^e capt of y^e Castle & M^r Foster, w^ch are on file.

This order remained in force nearly two years. The following is a repeal of the same:

Att a second Sessions of the Generall Court of Election, held at Boston 9^th of October 1667.

There being an order made in October, 1665, injoyning the capt of

the Castle to stop all shipps coming from England, for the prevention of the spreading of infection, it is ordered, that that law shall & hereby is repealed.

The Records of the Governor and Company of the Massachusetts Bay in New England, edited by Dr. Shurtleff, terminated in the year 1686. In chap. 87, of acts and resolves for the year 1867, it was resolved:

"That the Governor with the consent of the Council, be authorized to cause to be prepared for publication, the Acts and Laws of the late province of Massachusetts Bay, with such of the laws and orders recorded in the General Court as are of legal and historical importance, from the arrival of the province charter, in the year sixteen hundred and ninety-two, to the seventeenth of June, in the year seventeen hundred and seventy-four."

From the end of the records edited by Dr. Shurtleff, until the beginning of the publication called for by the above resolve, it will be seen that there is an interval of about six years. During the greater part of this period the records are meagre, owing to political troubles. Those preserved in the State Library contain no trace of any quarantine law.

On the 18th of July, 1700, an act was passed entitled "An act for the better preventing of the spreading of infectious sicknesses," as follows:

Whereas ships and other vessels arriving within this province, from parts beyond the seas, are ofttimes during their passage visited with the small pox, and other infections sicknesses, or come from places where such sicknesses are prevailing and epidemical, bringing with them cotton wool or other commodities in which the contagion is liable to be conveyed, and has in time past proved to be of pernicious and fatal consequence to the people of this province, the masters or commanders of such ships or vessels, not taking that due care as in such case they ought, to give information thereof before they bring their ships into harbour, and have landed their passengers or goods; for prevention of which mischief for future, and that this province by the blessing of God may be preserved from the coming in and spreading of contagious mortal sicknesses;—

Be it enacted by His Excellency the Governour, Council and Representatives in General Court assembled, and by the authority of the same,

SECTION 1. That no master or commander of any ship or vessel arriving to any port or harbour within this province, in which ship or other vessel, any person, passenger or seaman upon their passage shall be visited with the small pox or any other contagious sickness, or shall come from any port or place where any such sickness is epidemical and prevailing, may presume to sail or bring his ship or vessel within or above the castle or fort (where any such is), or within the space of half a mile next unto any peer, wharf or landing-place in such harbour where no fortification is, without license first had for so doing from the governour or commander-in-chief of this province for the time being, or from the two next justices of the peace, if such harbour lye more than ten miles distant from the place of the governour's residence, nor shall permit or suffer any of his passengers or seamen to be landed or brought on shore, or any person or persons to come on board without licence as aforesaid first had and obtained for the same, on pain that every master or commander of any ship or other vessel offending against this act shall forfeit unto his majesty the sum of one hundred pounds for and towards the support of the government of this province, to be recovered by action, bill, plaint or information in any of his majesty's courts of record within the same, wherein no essoign, protection or wager of law to be allowed.

SECT. 2. And, to the intent that all masters or commanders of ships or other vessels not belonging to this province may be duly informed of their duty by this act required, the captain of the castle, and the chief officer of every other fort or fortification in any other port or harbour within the same, are hereby commanded or enjoyned to examine and enquire of the health of all ships and other vessels arriving to the same, and to acquaint the masters or commanders thereof of the import of this act.

And be it further enacted by the authority aforesaid,

SECT. 3. That if any passengers or seamen arriving in any ship or vessel, visited with the small pox or other pestilential or infectious sicknesses upon her voyage, shall presume to come on shore before license had as aforesaid, it shall and may be lawful to and for any justice of the peace to require or send such person or persons, with their cloathing and bedding, or board such vessel again, or to confine them to such other place or places as such justice shall judge most suitable for preventing of infection; and all the cost and charges arising thereupon to be answered and paid by the passenger or seaman so offending as aforesaid, who also shall forfeit the sum of twenty pounds to the use aforesaid and to be recovered in manner as aforesaid. [*Passed and published July* 18.]

[This article will be continued in a future BULLETIN.]

MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER. Enteric.	FEVER. Malarial.	FEVER. Scarlet.	FEVER. Yellow.	Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
	1881.																			
Malden, Mass	January	12,017	6	22	16.2	3	2	1	4					2	1			1		
Milford, Mass	March	9,310		11	13.8	3								1				1		
Providence, R. I	do	104,850	48	173	19.4	27	2	1	8	1		4		19		1		4	14	7
New Haven, Conn	do	62,882	36	143	26.8	28		2	5	2				33			3			
Meriden, Conn	do	19,000	(?)	27	16.6	8								3						
New London, Conn	do	10,529	1	19	19.2	5								2						
Amsterdam, N. Y	do	9,360	1	10	12.8	3			10	1				1			1			
Dunkirk, N. Y	do	8,000	10	25	36.7	1	1					2		2						
Little Falls, N. Y	January	6,940	1	8	13.5									3						
Do	February	6,940	4	12	20.2	2								3						
Do	March	6,940	4	14	23.6	2								21		1				
Rochester, N. Y	do	89,877	57	170	22.2	33	11	1	5	4	2	3		2						
Yonkers, N. Y	do	18,892	2	28	17.4	11	1							3		1				
Hudson County, N. J	February	187,950	155	366	25.4	44	17	5	9	4	8	20		3						
Do	March	187,950	160	405	35.2	45	3	1	13	5	2	4		21		1				
Paterson, N. J	do	50,950	26	95	21.7	10	1		2			2		2			1			
Vineland, N. J	do	8,000	3	10	15.0	3						1		66		1	4	8		
Scranton, Pa	do	40,000	13	32	9.4		1							66		1	5	11	1	
New Castle, Pa	do	8,250	4	16	22.8	2								18						7
Wilmington, Del	do	42,500	24	91	25.1	15	1	2	10	3	10	2		1			2			
District of Columbia	February	180,000	136	362	24.1	71	10	7	3					6						
Norfolk, Va	March	21,966	24	61	32.6	11	1	2												
Petersburg, Va	do	22,000	27	66	35.2															
Polk County, Fla	February	3,500		1	3.4															
Do	March	3,500		1	3.4															
Selma, Ala	do	7,595	4	18	20.8	2								14	1	1				
Shelby County, Tenn	do	35,593	33	120	39.7	4	1	2						66	12	4	1		7	4
Nashville, Tenn	do	43,461	34	105	28.1	15	4	4	1	1	2	2		13						
Humboldt, Tenn	do	2,000	2	3	18.0	14	1	1						12	2					
Lansing, Mich	do	8,319	3	7	10.1	1								1						
Detroit, Mich	do	116,342	76	166	22.9	18	7							1						
Logansport, Ind	January	11,198	15	20	21.0	2	1							3						
Do	February	11,198	5	13	13.6	2	2							23	30	4	2			
Do	March	11,198	11	20	21.0	1			1					21	6	9	3			
Chicago, Ill	do	503,298	404	874	20.4	82	30		45	40	13	8	7		1		6			
Lake, Ill	do	18,200	16	35	22.5	5	1			2	1		3		7		2			
Galesburg, Ill	do	11,500	1	3	3.1										1					
Saint Paul, Minn	do	41,500	30	68	19.2	12	2	1		4	2				1					
Keokuk, Iowa	do	12,125	4	14	13.6	1									1					
Virginia City, Nev	January	15,750	1	15	11.2				2						7					
Denver, Colo	do	35,630	18	62	20.5	6			2	3	2	2	2		8					
Do	February	35,630	15	49	16.2	9			1	1	2		3		1			1		
Oakland, Cal	do	35,000	7	26	8.9	4			2						8					
Do	March	35,000	11	32	10.9	3	1				1				1					

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE MONTH ENDING APRIL 2, 1881.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Albany Hospital	Albany, N. Y	General	150	54	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saint Mary's Hospital	Rochester, N. Y	do	320	209	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	4	..	..
City Hospital	do	do	125	67	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saint Michael's Hospital	Newark, N. J	do	140	154	7	4	2	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	9	..	6
Jewish Hospital	Philadelphia, Pa	do	40	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Homeopathic Hospital	do	do	40	33	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	2	2	..	..	1	..	..	..
Providence Hospital	Washington, D. C	do	160	107	1	1	1	4	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	2	3	..	..
Freedmen's Hospital	do	do	300	263	14	..	3	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..
Cincinnati Hospital	Cincinnati, Ohio	do	500	402	25	27	5	18	..	..	..	..	2	12	..	..	..	..	..	..	7	5	..	6	2	..	..	2
Saint Luke's Hospital	Detroit, Mich	do	25	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
German Hospital	San Francisco, Cal	do	150	79	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	5	..	2	..	1
Naval Hospital	Chelsea, Mass	do	100	24	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Do	Brooklyn, N. Y	do	115	47	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1
Do	Washington, D. C	do	50	33	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	1
Do	Mare Island, Cal	do	77	36	2	1	..	3	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	1	..	1	..	..
New York City Lunatic Asylum	Blackwell's Island	Insane	..	1329	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willard Asylum	Willard, N. Y	do	1694	1696	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Pennsylvania Hospital for Insane	Dixmont, Pa	do	500	585	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	500	351	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
State Hospital for Insane	Danville, Pa	do	250	395	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Lunatic Asylum	Williamsburg, Va	do	368	328	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
State Lunatic Asylum	Austin, Tex	do	..	381	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Michigan Asylum	Kalamazoo, Mich	do	690	683	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Insane Asylum of California	Stockton, Cal	do	1106	1107	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Name of hospital.	Place.	Character of hospital.	Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Smallpox.				Totals.			
			Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Albany Hospital	Albany, N. Y	General	..	..	..	..	7	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	46	49	5	45
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	6
Saint Mary's Hospital	Rochester, N. Y	do	1	..	..	..	1	..	..	..	..	..	..	..	4	6	..	..	..	..	..	..	37	31	7	11
City Hospital	do	do	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44	32	4	75
Saint Michael's Hospital	Newark, N. J	do	..	..	..	..	4	1	3	1	..	..	..	..	..	..	..	..	..	..	..	..	95	82	16	151
Jewish Hospital	Philadelphia, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	11	..	17
Homeopathic Hospital	do	do	..	..	..	..	2	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	33	33	2	31
Providence Hospital	Washington, D. C	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	94	87	4	103
Freedmen's Hospital	do	do	..	..	..	..	2	..	1	..	..	..	..	..	4	..	..	..	..	..	..	..	87	73	14	263
Cincinnati Hospital	Cincinnati, Ohio	do	..	..	..	..	24	22	9	8	6	16	2	2	1	..	1	..	..	..	..	..	330	423	37	294
Saint Luke's Hospital	Detroit, Mich	do	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	2	15
German Hospital	San Francisco, Cal	do	..	..	..	..	3	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	57	51	8	68
Naval Hospital	Chelsea, Mass	do	..	..	..	..	1	..	..	1	3	7	..	5	..	..	..	..	..	..	..	..	5	8	..	22
Do	Brooklyn, N. Y	do	..	..	..	..	4	3	..	4	..	..	..	..	..	..	..	..	..	..	..	..	6	5	..	38
Do	Washington, D. C	do	..	..	..	..	1	2	..	3	2	10	..	1	..	..	..	..	..	..	..	..	15	26	..	22
Do	Mare Island, Cal	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	..	4
New York City Lunatic Asylum	Blackwell's Island	Insane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	53	22	13	1347
Willard Asylum	Willard, N. Y	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	7	10	1702
Western Pennsylvania Hospital for Insane	Dixmont, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	15	4	583
Pennsylvania Hospital for Insane	Philadelphia, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	12	3	358
State Hospital for Insane	Danville, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	200	2	200
Eastern Lunatic Asylum	Williamsburg, Va	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	1	4	331
State Lunatic Asylum	Austin, Tex	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	8	2	381
Michigan Asylum	Kalamazoo, Mich	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	10	4	692
Insane Asylum of California	Stockton, Cal	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	13	8	1110

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 16, 1881.

States and Cities.		Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	6	9.3			6						3								1	
	Bangor	16,857	6	18.5			6						1									
N. H	Concord	14,000	4	15.1			4														1	
Vt.	Burlington	11,364	5	23.0	11,248	116	5						2									
Mass.	Boston	362,535	183	26.3	356,535	6,000	180	3	26.5	26.1			65	1			2				24	1
	Cambridge	52,740	14	13.7			14						3								2	
	Edgartown	1,301																				
	New Bedford	26,875	14	27.2			13	1					2								5	
	Newburyport	13,537	8	30.8			8						2				1				2	
	Marblehead	7,407	6	41.8	7,451	16	6		41.8				3									
	Nantucket	3,726																				
	Plymouth	7,094	4	29.0			4						2								3	
	Fall River	49,006	20	21.3			20						8						1		3	
	Lowell	59,485	23	20.2	59,307	178	23		20.2				6				1				6	
	Lawrence	39,178	11	14.7			11						3						2		4	
	Pittsfield	13,367	4	15.6			4										1					
	Worcester	58,295	29	25.9									5								6	
	Lynn	38,284	19	25.9									1								2	
	Brockton	13,608	1	3.8																	1	
	Holyoke	21,851	9	21.5			9						1								4	
	Bridgewater	3,620	2	28.9			2						1									
	Milford	9,310	4	22.4			4						1									
	Chicopee	11,325	3	13.8			3															
	Fitchburg	12,405	3	12.6			3														2	
	Somerville	24,985	5	10.4			5						1								1	
	Springfield	33,340	8	12.5									1								1	
	Spencer	7,466	4	27.9			4						1								2	
	Quincy	10,529	4	19.8			4						1								1	
	Northampton	12,172	5	25.7			5						1								1	
	Haverhill	18,475	5	14.2			5														1	
	Gloucester	19,329	9	24.7			9						2								1	
	Chelsea	21,785	9	21.3			9						2								1	
	Clinton	8,030	4	26.1			4														2	
	Beverly	8,445	3	19.0			3														1	
	Attleborough	11,109	8	41.7			8						1						1		1	
	Malden	12,017	4	17.4			4						1									
	Salem	27,500	6	11.3			6						1								2	
	Taunton	21,200	6	14.6			6						1								2	
	Westboro'	5,217	7	69.9			6	1					2	1			1					
	Woburn	10,982	2	9.6			2															
	Weymouth	10,571	4	19.8			4														1	
	Waltham	11,711	6	26.6			6						1								1	
	Webster	5,696	1	9.2			1						1									
	Westfield	7,700																				
	Brookline	8,030	1	6.2	8,024	6	1															
	Newton	16,996	6	18.2			6														1	
R. I.	Providence	104,855	47	23.4	101,209	3,646	45	2	23.2	27.5			14	2			2				6	
Conn	New Haven	62,882	22	17.7			22						5				1				2	
	New Britain	13,978	5	18.7			5						3				1					
	Waterbury	20,269	10	25.7			10														3	
	Fairfield	3,478	1	15.2			1						1									
	Norwich	21,150	5	12.2			5						2				1				1	
N. Y	New York	1,206,577	789	34.1	1,186,144	20,433	768	21	33.7	53.6			297				20		22		98	
	Brooklyn	566,689	236	18.8			232	4					88	2			2		1		44	
	Yonkers	18,892	8	22.1			8						1				1				2	
	Poughkeepsie	20,207	4	10.3			4						1								2	
	Newburg	18,050	10	28.9			10						4								1	
	Rochester	89,363	48	28.0									17								9	
	Buffalo	155,137	34	18.2			53	1					19	1			1				9	
	Binghamton	17,315	3	9.0			3															
	Cambridge	1,850			1,800	50																
	Seneca Falls	6,000	4	34.8	5,950	50	4		34.7													
	Utica	33,923	9	13.9			9						4								1	
	Little Falls	6,940	2	14.7			2															
N. J	Hudson County	187,950	113	31.4									35				4		1		8	
	Orange	13,206	4	15.8			4						3									
	Camden	41,658	17	21.3			17						9				1				2	
	Plainfield	8,126	1	6.5			1														1	
	Asbury Park	1,640																				
Pa	Philadelphia	846,980	412	25.4	815,182	31,798	380	32	24.3	52.5			135				5		2	1	57	7
	Pittsburgh	156,381	70	23.4	152,290	4,091	63	7	21.5	91.2			33	2			3		7		10	
	Erie	27,730	8	15.1			8						5								1	
	Reading	43,280	16	19.3	42,926	354	16		19.1				6									
Del	Wilmington	42,499	25	30.7			17	8					9	5			1		1		2	
D. C	District of Columbia	180,000	95	27.5	120,000	60,000	48	47	20.8	40.7			12	24				1			7	14
Va	Richmond	63,803	46	37.6			20	26					8	11							4	5
	Norfolk	21,966	14	33.3			4	10					2	5								3
	Lynchburg	15,959	18	58.8			2	16						8					1			2
W. Va	Wheeling	31,266	10	16.3			10						3				2					
N. C	Wilmington	17,361	3	9.0			2	1									1					
S. C	Charleston																					
Ga	Augusta	23,023	12	27.2			5	7					3	2								2
	Atlanta	37,421	21	28.9	21,086	16,335	10	11	24.4	35.0			5	5					1			1
	Savannah	30,681	20	34.6	15,007	15,674	8	12					1	4							3	3
	Rome	5,000	7	73.0			2	5					1	3								
	Brunswick	2,900	1	18.0	1,500	1,400	1		34.7													
Fla	Jacksonville	8,000	5	32.6	5,000	3,000	3	2	31.3	34.4											2	
	Key West	12,000	4	17.4	8,000	4,000	1	3	6.5	39.0			1	2								2
Ala	Mobile	31,205	14	17.4	16,827	14,378	4	10	12.3	36.3				2							3	1
	Selma	7,505	4	27.8														1				
Miss	Columbus	5,230	2	20.0	2,760	2,740		2		40.7				1								
	Natchez	7,000	4	30.4	3,500	3,500		4		59.6				3								
	Vicksburg	11,814	5	21.1			1	4						1			1					
La	New Orleans	216,140	113	24.3	159,128	57,231	71	42	23.3	38.3			15	12			1	1		1	10	5
	Shreveport	8,033	3	14.1	3,916	4,117	2	1	26.7	12.8												
	Morgan City																					

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 16, 1881.

Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Cities.	States.
								Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.											
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
														1								1								Portland	Me.
1														1		1														Bangor	
														1																Concord	N. H.
																														Burlington	Vt.
7		2		11		1		2				3		22				9		1		5		3				1		Boston	Mass.
				1																										Cambridge	
						1	1					1																		Edgartown	
																														New Bedford	
				1										2				1						1						Newburyport	
																														Marblehead	
																														Nantucket	
																														Plymouth	
1										2				2																Fall River	
		1		1										3																Lowell	
		1																												Lawrence	
																														Pittsfield	
1								1				1		2				1												Worcester	
								1						3		2														Lynn	
																														Brockton	
								1						1																Holyoke	
						1								1																Bridgewater	
								1																						Milford	
																														Chicopee	
														1																Fitchburg	
														2																Somerville	
														2																Springfield	
																														Spencer	
				2										3																Quincy	
																		1												Northampton	
						1		1						1																Haverhill	
1														1																Gloucester	
1																														Chelsea	
1																														Clinton	
						2		1																						Beverly	
1														1				1												Attleborough	
																														Malden	
														1																Salem	
								2				1																		Taunton	
														1																Westboro'	
																														Woburn	
														1																Weymouth	
																														Waltham	
																														Webster	
																														Westfield	
																														Brookline	
		1												1																Newton	
		1		1								2	1	6	1	1		2				2		1						Providence	R. I.
														3										1						New Haven	Conn.
																		1												New Britain	
														1										1						Waterbury	
																														Fairfield	
																														Norwich	
22		11		38		7		7		15		49		98				48				7		8		11		4		New York	N. Y.
5		2		21		2		3		4		10		21	1	1		8		1		4		1						Brooklyn	
														2																Yonkers	
																1														Poughkeepsie	
														2												1				Newburgh	
4				1										8		2		4										1		Rochester	
				2										9				2												Buffalo	
																		1						2						Binghamton	
																														Cambridge	
								1						2																Seneca Falls	
1								1				1																		Utica	
																														Little Falls	
4		3		5		2		2		2		2		6				2						5		4				Hudson County	N. J.
												1																		Orange	
								1		1		5		1																Camden	
																														Plainfield	
																														Asbury Park	
8		4		3	2	2		7				5		40	1	5		10	5	1						32	5	1		Philadelphia	Pa.
1		1		2				1				11		2		1		4				1								Pittsburgh	
				2		1				1																				Erie	
																														Reading	
	1	1												1												3				Wilmington	Del.
		1	1	2				1		1		1		2	7	1			3					1				1		District of Columbia	D. C.
		1			1			1						2	1							1	2			1	1	2		Richmond	Va.
			1	3	1									1	3															Norfolk	
															1		1													Lynchburg	
		1		2																										Wheeling	W. Va.
						1																								Wilmington	N. C.
																														Charleston	S. C.
			2											2	2							2		1						Augusta	Ga.
1									1			1		1	2															Atlanta	
			1		1				1	1				1	3									1						Savannah	
														1	2									3						Rome	
														1																Brunswick	
																														Jacksonville	Fla.
																			1											Key West	
			1																1											Mobile	Ala.
															1							1								Selma	
															1															Columbus	Miss.
			1												1								1							Natchez	
									1																					Vicksburg	
1		3	1						3	2	9		3	3				2	3			1			1					New Orleans	La.
									1		1																			Shreveport	
																			1											Morgan City	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 16, 1881—Continued.

	Cities and States.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
La	Baton Rouge	7,187	1	7.3	2,954	4,233		1		12.3												
Tex	San Antonio																					
	Austin	10,960	6	28.6			1	5														1
	Waco	8,000	4	26.1	5,000	3,000		4		68.8				1								
	Galveston	22,253	13	30.5	17,025	5,228	8	5	24.1	49.7			2	4				1				
	Brownsville																					
	Marshall																					
Ark	Little Rock	13,185	6	23.7			1	5						1					1			
Tenn	Nashville	44,000	26	31.2	25,338	18,662	9	17	16.5	56.2	3,219	1,870	1	7					1		1	3
	Memphis	33,593	37	57.5			19	18					5	5							4	1
	Clarksville	7,250	1	7.2	4,000	3,250		1		16.1												
	Murfreesboro'	3,850	1	13.8	2,000	1,850	1		26.1													
	Trenton	1,400																				
Ky	Louisville	123,625	44	18.6			30	14					5	7							10	6
	Bowling Green	6,000	2	17.4	4,000	2,000	1	1	13.0	26.0			1						1			1
Ohio	Cincinnati	255,708	121	24.7			113	8					50	1			3		2		17	2
	Cleveland	160,140	61	19.9													1				10	
	Gallipolis	4,500	3	34.8			2	1					1	1					1			
	Dayton	38,077	12	16.1	37,688	989	11	1	15.1	54.5			3				1				3	
	Portsmouth	11,314	6	27.7			4	2						1							2	1
Ind	Indianapolis	75,074	32	22.2			26	6					11				1		1		4	1
	Richmond	12,743	3	12.3			2	1					1	1								
	Evansville	29,280	9	16.1			9						4				1		2		1	
Ill	Chicago	503,298	198	20.5									87				5		13		20	
	Peoria	29,315	13	23.1			12	1					2				1				5	
	Aurora	11,825	5	22.6			5						2									
	Jacksonville	10,927	3	14.3			3						2									
	Elgin	8,770	2	11.9			2						1									
	Moline	8,200	3	19.1	8,000	200	3		19.6				1						1		1	
	Lake	18,396	12	34.0			12						6									
Wis	Milwaukee	115,578	42	18.8			42						20				2		3		3	
Minn	Saint Paul	41,498	14	17.6			14												1		1	
Mich	East Saginaw	19,016	5	13.7			5						2								1	
	Flint	9,000	2	11.6			1	1					1									
	Lansing	8,500	1	5.7			1						1									
Iowa	Dubuque	22,254	5	11.8			5															
	Keokuk	12,117	5	21.5	11,157	960	4	1	18.7	54.4			1	1							1	1
Mo	Saint Louis	350,522	149	22.1	328,522	22,000	131	18	20.8	42.8			42	6				1	26	2	17	5
	Kansas City	55,813	10	9.3			9	1					4	1							3	
Nebr	Omaha	30,518	2	5.4			2						2						1			
Kans	Lawrence	8,500	4	24.0	6,800	1,700	2	2	15.3	61.3				1							1	1
Colo	Boulder	3,030	1	17.2																		
Utah	Salt Lake City	20,768	4	10.0			4						2									
Cal	San Francisco	212,740	81	18.1									18				3				10	
	Los Angeles	11,311	3	13.8									1									
	Total	8,048,272	3,761	24.1									1,047	135			71	5	85	7	496	69

ABSTRACTS FROM CONSULAR REPORTS.

CONSTANTINOPLE.—United States Consul G. H. Heap reports, under date of March 28, that the epidemic of small-pox in the city is at an end, no deaths having been reported for three weeks. A few sporadic cases are still observed, but these almost always exist in Constantinople.

The following extracts are made from the telegrams relating to the plague in Persia:

1. *March* 21.—Dr. Zitterer states that the authorities have responded readily to the orders of the Porte, and given all the aid in their power to the execution of sanitary measures directed by the council. In the village of Kuffé nine huts were burned, and also a quantity of infected clothing, &c. Evacuation of the place was then enforced, and the people compelled to submit to general disinfection. From 15 to 18 deaths per day are reported at Nedjeff.

2. *March* 22.—Having proceeded to Nedjeff, Dr. Zitterer reports the plague increasing in two quarters of that town. During the three days ending March 21, there were 116 new cases and 66 deaths reported. In one house 10 out of 12 persons died; in others, whole families perished. The disease increases at Djaara, where 12 to 14 deaths per day are reported, and those attacked are not cared for.

3. *March* 23.—Forty-nine new cases and 26 deaths at Nedjeff. Later advices include a telegram from Dr. Bartoletti, inspector-general, to Dr. Zitterer, dated March 30, authorizing the most stringent measures, and especially the destruction by fire of all infected houses and personal property.

The consul also forwards a copy of an agreement made December 8, 1872, between the Turkish and Persian Governments, by which Persian subjects who desired to use the sacred ground of certain places near Bagdad were obliged to bury their dead at home for three years, and record the date of the death. At the end of that time a certificate from the proper authorities would permit the transportation of the remains, and without such certificate no corpses were to be removed.

The letter of Dr. Matteosian, with later advices from Dr. Zitterer, will be given in the next number of the BULLETIN.

SANDWICH ISLANDS.—United States Consul D. A. McKinly forwards the report of mortality in Honolulu for the month of February. There were 74 deaths, of which 13 were under 1 year, 21 under 5 years, and 8 over sixty years of age. Among the causes of death were: Consumption 8, other lung diseases 2, diarrhœal diseases 2, small-pox 32. It is evident that the last-named disease is epidemic, and is increasing, as the report for the week ending March 1 gives 17 deaths, or more than one-half of the total for the month from small-pox. Total number of cases reported to date, 219; deaths, 33.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BROWNSVILLE, TEX.—The report of Dr. J. M. Main, for the month of March, shows 7 deaths from small-pox, all under 17 years of age; the mortality from other diseases and the death-rate for the month will appear in the table of monthly reports.

DUBUQUE, IOWA.—The financial report for the year ending February 28, 1881, gives also the following vital statistics: Population, 22,254; births, 572; annual birth-rate, 25.7. Deaths, 266; annual death-rate, 12.0 per 1,000. Of the total of deaths 233, or 88 per cent., were from "infectious diseases," divided as follows: Diphtheria, 47; erysipelas, 8; croup, 14; measles, 9; puerperal fever, 7; scarlet fever, 117; typhoid fever, 12; varicella, 1; whooping cough, 18; total, 233. Scarlet fever caused 44 per cent. of all deaths, and was epidemic from October to the close of the year reported, showing a decrease in February.

PERU, IND.—The report of the local board of health for the first quarter of 1881 gives a total of 42 deaths, of which 20 were under

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 16, 1881—Continued.

Cities.	States.	Croup.		Diarrhœal diseases.		Diphtheria.		Erysipelas.		Fever. Typhoid.		Fever. Malarial.		Fever. Scarlet.		Acute lung diseases. Pneumonia.		Acute lung diseases. Congestion of lungs.		Acute lung diseases. Bronchitis, acute.		Acute lung diseases. Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.	
		W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Baton Rouge	La.																														
San Antonio	Tex.																														
Austin				1	1											1										1					
Waco					1																				1						
Galveston					2											1		2		1											
Brownsville																															
Marshall																															
Little Rock	Ark.											1				1			1												
Nashville	Tenn.											1				3	2								3						
Memphis					1		1					2	2				1									1					
Clarksville																															
Murfreesboro'																															
Trenton																															
Louisville	Ky.				1					2				1		2	2														
Bowling Green																															
Cincinnati	Ohio.			1		1		2		2		1		1		16		2		2	1			8		2					
Cleveland		1		2				1		1		1		2				1		6				1							
Gallipolis																															
Dayton																	1														
Portsmouth																															
Indianapolis	Ind.			1	1	1		2					1			3	2	1													
Richmond																															
Evansville										1						1		1												1	
Chicago	Ill.	5		1		11		3		2		2		7		20		3		10				1		4		9		3	
Peoria							1									1															
Aurora										1						1															
Jacksonville																1								2							
Elgin																															
Moline																															
Lake										2						1				1											
Milwaukee	Wis.	1				2		1		2				1		2				1						1					
Saint Paul	Minn.															4															
East Saginaw	Mich.	1						1								1															
Flint																															
Lansing																															
Dubuque	Iowa.											1		1																	
Keokuk																															
Saint Louis	Mo.			3		1				2		6	2		1	12	2	1		3					1						
Kansas City												1	1			1		1													
Omaha	Nebr.																														
Lawrence	Kans.																														
Boulder	Colo.																														
Salt Lake City	Utah.					1										1															
San Francisco	Cal.					3		1		4						5		1		2						1		6			
Los Angeles																1															
		69	1	43	15	118	7	32	1	54	2	45	11	117	2	347	41	28	2	123	15	3		37	8	39	1	64	9	14	

5 years and 5 over 60 years of age. Among the causes of death were: Consumption, 2; other lung diseases, 9; diphtheria, 2; croup, 1; scarlet fever, 9; measles, 1; malarial fevers, 3; puerperal fever, 2. One still birth is noted. The population of the town is not given.

The following reports, for the week ending April 16, are from places in which burial permits are not required:

Allegheny, Pa., 78,000; deaths, 48; under 5 years, 28; accident 1, cerebro-spinal meningitis 7, consumption 2, diphtheria 1, erysipelas 1, typhoid 1, scarlet fever 6, pneumonia 4, bronchitis 2, measles 1. Bath, Me., 8,000; deaths, 4; under 5 years, 1; consumption 1, puerperal 1. Belfast, Me., 5,308; deaths, 3; under 5 years, 1; croup 1. Brattleborough, Vt., 6,000; deaths, 2; under 5 years, 1; consumption 1, bronchitis 1. Bucyrus, Ohio, 3,950; deaths, 4; under 5 years, 1; pneumonia 1, congestion of lungs 1, measles 1. Calais, Me., 6,172; deaths, 2; under 5 years, 2; accident 1, congestion of lungs 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 5; under 5 years, 2; cerebro-spinal meningitis 1, consumption 2. Circleville, Ohio, 5,996; death, 1; under 5 years, 1; pneumonia 1. Clinton, Mich., 1,200; no deaths. Coldwater, Mich., 4,800; deaths, 3; under 5 years, 1; accident 1, cerebro-spinal meningitis 1, pneumonia 1. Corinth, Miss., 2,264; deaths, 2; pneumonia 2. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,327; deaths, 3; under 5 years, 1; cerebro-spinal meningitis 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Greenville, S. C., 6,159; deaths, 3; under 5 years, 1; consumption 1, congestion of lungs 1, puerperal 1. Gunn City, Mo., 125; no deaths. Hernando, Miss., 1,000; no deaths. Huntingdon, Pa., 4,500; death, 1; pneumonia 1. Huntingdon, Tenn., 1,200; one death. Iuka, Miss., 816; death, 1; consumption 1. Jefferson, Tex., 3,250; death, 1; under 5 years, 1. La Salle, Ill., 8,885; deaths, 5; under 5 years, 2; cerebro-spinal meningitis 4, accident 1. Louisiana, Mo., 5,000; deaths, 2; consumption 1. Madison, Ind., 8,945; deaths, 12; under 5 years, 4; congestion of lungs 3, bronchitis 1, pleurisy 1. Martinsburg, W. Va., 6,384; deaths, 2; consumption 1, typhoid fever 1. Milan, Tenn., 1,800; death 1; pneumonia 1. Milledgeville, Ga., 3,000; one death. Muscatine, Iowa, 8,412; deaths, 2; under 5 years, 1; cerebro-spinal meningitis 1, scarlet fever 1. Muskegon, Mich., 11,300; deaths, 10; under 5 years, 2; consumption 2, diphtheria 2, typhoid fever 1, malarial fever 1, pneumonia 1, congestion of lungs 1, puerperal 1. Niles, Mich., 4,200; death, 1; bronchitis 1. Ocala, Fla., 1,000; no deaths. Painesville, Ohio, 5,504; deaths, 2; consumption 1. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; one death. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; no deaths. Rensselaer, Ind., 900; one death. Santa Cruz, Cal., 5,000; no deaths. Senatobia, Miss., 935; no deaths. Springfield, Ohio, 21,000; deaths, 16; under 5 years, 5; consumption 4, diarrhœa 1, croup 1, diphtheria 1, pleurisy 2, puerperal 1. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; no deaths. Tuskaloosa, Ala., 2,000; no deaths. Verona, Miss., 1,000; no deaths. Winchester, Va., 5,000; deaths, 3; consumption 1. Winona, Minn., 10,000; death, 1; consumption 1. Youngstown, Ohio, 14,521; deaths, 7; under 5 years, 2; accident 1, cerebro-spinal meningitis 2, bronchitis 2. Total population, 304,782; deaths under 5 years, 57; total number of deaths, 151; annual rate per 1,000, 25.8.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
France	Paris	1,988,806	Apr. 9	1,196	31 4	.....	.....	.....	.....	.....	37	.....	34	.....	.....	.....	103	.....
	Lyons	342,815	Mar. 26	172	32.2	.....	.....	.....	.....	.....	13	.....	3	.....	.....	.....	6	.....
	Rouen	104,209	Apr. 9	55	27.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Geneva	50,233	Apr. 2	10	10.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	Apr. 2	203	33.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	42
	Rotterdam	152,515	Apr. 9	84	28.6	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	22	.....
Germany	Berlin	1,123,571	Mar. 26	531	24.6	.....	.....	.....	.....	5	2	11	2	1	.....	138	54	38.1
	Breslau	273,000	Mar. 26	189	36.1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	21	35.9
	Brunswick	74,000	Mar. 26	48	33.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	37.2
	do	74,000	Apr. 2	29	20.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.2
	Barmen	95,000	Apr. 2	48	26.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	44.4
	Bremen	112,200	Mar. 26	40	18.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Frankfort	137,000	Mar. 26	54	21.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.3
	do	137,000	Apr. 2	64	24.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	42.5
	Mannheim	50,500	Apr. 9	20	19.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.3
	Hamburg	400,000	Mar. 19	236	30.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	.....
	Cologne	144,751	Apr. 2	76	27.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....
Bavaria	Munich	230,000	Apr. 2	163	37.0	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	19	.....
Belgium	Brussels	406,638	Apr. 2	207	35.8	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	3	.....
	Antwerp	173,643	Mar. 26	64	19.2	.....	.....	.....	.....	12	2	12	5	.....	.....	.....	.....	.....
	do	173,643	Apr. 2	79	23.7	.....	.....	.....	.....	11	3	13	5	.....	.....	.....	.....	.....
Saxony	Dresden	220,216	Mar. 26	131	30.9	.....	.....	.....	.....	.....	.....	1	1	.....	.....	11	11	38.3
	Leipsic	151,616	Apr. 2	64	21.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	37.9
	Chemnitz	95,135	Mar. 26	73	40.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Denmark	Copenhagen	235,254	Mar. 29	111	24.6	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	15	34.2
Italy	Genoa	185,000	Apr. 9	64	18.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.4
Austria	Trieste	128,295	Mar. 12	105	42.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Vienna	731,191	Apr. 2	450	27.2	.....	.....	.....	.....	.....	19	.....	3	.....	1	.....	23	42.9
Roumania	Bucharest	177,646	Apr. 2	113	33.2	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	14	.....
Hungary	Buda-Pesth	370,037	Mar. 26	246	34.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russian Poland	Warsaw	379,763	Mar. 26	185	25.4	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	35.0
Sweden	Stockholm	169,429	Mar. 26	99	31.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	11	41.2
Norway	Christiania	120,000	Mar. 26	60	27.7	.....	.....	.....	.....	4	2	1	.....	.....	.....	10	4	41.3
Canada	Port Sarnia	4,000	Apr. 18	3	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Kingston	16,000	Apr. 16	1	3.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bermuda	Hamilton	14,867	Apr. 5	5	17.5	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	63.5
	do	14,867	Apr. 12	4	14.0	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	62
	do	14,867	Apr. 19	4	14.0	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	65.4
Cuba	Havana	195,437	Apr. 9	185	49.4	.....	.....	.....	1	.....	30	.....	21	.....	.....	.....	.....	76
Hayti	Port au Prince	30,000	Mar. 30	15	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
	do	30,000	Apr. 6	13	22.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
	Aux Cayes	9,000	Mar. 26	8	46.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
	do	9,000	Apr. 2	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
Guadeloupe	Point-a-Pitre	22,919	Mar. 5	20	45.5	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
	do	22,919	Mar. 12	24	54.6	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
	do	22,919	Mar. 19	19	43.2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aspinwall	Colon	3,000	Apr. 9	3	51.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
	do	3,000	Apr. 16	2	34.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
Brazil	Rio de Janeiro	330,000	Mar. 19	217	34.3	.....	.....	.....	11	.....	.....	.....	6	.....	.....	.....	7	.....
	do	330,000	Mar. 26	196	31.0	.....	.....	.....	7	.....	1	.....	4	.....	.....	.....	5	.....
Teneriffe	Santa Cruz	16,610	Mar. 26	9	28.3	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	68.1
Ireland	Queenstown	10,000	Apr. 9	3	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	do	10,000	Apr. 16	1	5.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Belfast	230,000	Apr. 9	107	31.9	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	7	.....
	Dublin	333,401	Apr. 9	197	30.7	.....	.....	.....	.....	.....	.....	.....	4	.....	3	.....	5	.....
Scotland	Dundee	155,100	Apr. 2	52	17.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	45.3
	do	155,100	Apr. 9	54	18.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.5
	Leith	59,958	Apr. 9	22	19.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	36.7
England	London	3,707,130	Apr. 2	1,547	21.8	.....	.....	.....	.....	.....	56	.....	7	.....	1	.....	101	39.1
	Bradford	197,196	Apr. 8	72	18.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Sheffield	304,938	Apr. 2	103	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34.5
	do	304,938	Apr. 9	142	24.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.4
	Liverpool	549,834	Apr. 9	295	28.0	.....	.....	.....	.....	1	1	4	4	10	2	14	11	39.3
Wales	Cardiff	83,389	Apr. 9	24	14.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	42.1
Spain	Cadiz	65,028	Mar. 26	26	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66.2
	do	65,028	Apr. 2	79	33.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Seville	138,000	Mar. 20	69	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	15	68.0
	do	138,000	Mar. 27	68	25.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	15	.....
	Malaga	115,882	Apr. 3	84	37.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	68.5
Barbary	Tripoli	20,000	Mar. 26	4	10.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.8
	do	20,000	Apr. 2	11	28.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76.3
Cape Colony	Cape Town	35,000	Mar. 21	28	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
Seychelles Islands	Mahé	12,000	Feb. 26	1	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	do	12,000	Mar. 5	5	21.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
	do	12,000	Mar. 12	4	17.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
	do	12,000	Mar. 19	6	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82

National Board of Health

BULLETIN.

Vol. 2.] WASHINGTON, D. C., SATURDAY, MAY 7, 1881. [No. 45.

QUARANTINE PROCLAMATION FOR PORTS IN THE STATE OF TEXAS.

EXECUTIVE OFFICE, AUSTIN, TEX., *April* 26, 1881.

Be it known that I, O. M. Roberts, by the authority vested in me as governor, by the laws of this State, do hereby declare quarantine to exist, and to be enforced on the coast of Texas, at the stations hereinafter mentioned, to commence from and after the 1st day of May, A. D. 1881, and continue until closed or modified by directions of the governor:

First—Said quarantine shall be applied to all vessels sailing from or touching at any port or place infected by disease that is liable to be carried by said vessels, their passengers, cargoes, or crews, and entering a port of Texas.

Second—Said quarantine shall be applied to *all vessels* sailing from or touching at *any port or place* south of north latitude twenty-five degrees and entering a Texas port, unless it be some particular port or ports where no infectious disease exists, satisfactory evidence of which must be sent to this office beforehand, and *exemption* so declared by the governor.

Third—The said quarantine is to be enforced under the following rules:

RULE 1. All vessels arriving at any of said coast stations shall come to anchor, and not be allowed to weigh anchor until boarded by the quarantine officer of the station and *free pratique* is granted by said officer.

RULE 2. It shall be the duty of the quarantine officer to detain vessels long enough for thorough inspection, and to ascertain every possible fact pertaining to their sanitary conditions that might endanger the inhabitants of this State. Vessels from an infected place, with clean bills of health, and having had no sickness of an infectious kind *en route*, shall be detained, and subjected to processes for purification, a sufficient number of days to make, when added to the number of days passed between the day of departure from last infected place and the day of arrival at said quarantine station, a *sum total of twenty days*.

All vessels, with clean bills of health, and having had no sickness of an infectious kind *en route* from infected places so far distant from the Texas coast that twenty or more days must necessarily be consumed in the voyage, shall only be detained a sufficient length of time to enable the quarantine officer to enforce such rules and regulations as may be deemed requisite for the purification of passengers, crew, cargo, and vessel.

All vessels, from any port, arriving at quarantine station, having at time of arrival, or having had during the voyage, sickness of an infectious kind, shall be detained twenty days after death or recovery of the last case of said sickness, and longer if the inspecting officer is not satisfied that proper measures were taken immediately after the recovery or death of the *sick* to thoroughly purify the apartments occupied by destroying beds, bed clothing, wearing apparel, &c., that could possibly be converted into fomites.

In all cases where the above rules have been complied with, and there still remains a doubt in the mind of the quarantine officer as to the propriety of admitting a vessel, he shall detain said vessel, report his reasons for so doing to the governor, and subject it to daily inspection until all doubt is removed or orders received to admit it.

RULE 3. Any vessel coming from a port or place north of the twenty-fifth degree of latitude, and which has not been south of it during this season, or which has been properly disinfected after being there, and contains a cargo that has recently been brought from a port or place south of that latitude, or from an infected port north of it, which cargo has been properly disinfected, of which satisfactory information must be furnished to the health officer at any Texas port, may be admitted after thorough inspection and no suspicion of danger is entertained; but if there has been no proper disinfection of vessel and cargo when necessary, the vessel must be regarded and treated as doubtful; and passengers or crew recently from south of said latitude would give the vessel the same doubtful character. And when quarantine shall have been declared upon the land borders of the State, the same precautions must be taken in regard to all tropical productions and to passengers and employés transported in railroad cars, or steamboats, or other vessels into Texas.

RULE 4. Any contemplated modification of the above rules, that may be justified by the erection of disinfecting warehouses at Galveston or elsewhere, shall first be submitted to the governor for his action, to be granted only upon such conditions as to expense, and under such regulations as may be prescribed, so as to secure positive safety, which action shall govern all ports alike, upon similar conditions, regulations, and restrictions as nearly as may be found practicable. Said warehouse would greatly facilitate commerce by diminishing the number of days now thought necessary to embargo a vessel from an infected port, and would probably give greater security in ten days than we now have in twenty; but, with a warehouse or without one, the crew of a vessel from an infected port shall be held for ten days from the handling of, and breaking the bulk of cargo, before permitted to pass quarantine.

RULE 5. Whenever any apparatus or preparations shall be offered for disinfecting purposes they must be submitted with full description to the governor, who will inspect and pass upon them; and in all such cases perfect safety must be assured before they will be adopted, and specific instructions will be given from this office to health officers who may use them.

RULE 6. Vessels from infected ports, laden with *only* such articles as cannot possibly convey yellow fever, such as agricultural implements, machinery, iron, lumber, wagons, bacon, salt, &c., an itemized list of which will be given, may be admitted upon conditions stipulated beforehand for the admission of such vessel at any port, and proper arrangements made therefor under such directions as may be sanctioned by the governor.

RULE 7. Vessels coming empty from infected ports for shipping cattle may be admitted at any port, after complete arrangements have been made to insure positive safety under such regulations and restrictions as may be prescribed beforehand upon application therefor.

RULE 8. The boards of health, and officers acting under them, will please examine and observe the laws of this State relating to quarantine, both in the digest of civil statutes and in the general laws of the sixteenth legislature, and all civil officers and citizens are respectfully requested to aid said officers in the enforcement of the laws and regulations.

RULE 9. The respective boards and health officers should give heed to the instructions and advice of the National Board of Health and its officers, given in aid of State quarantine, not disregarding, however, the more rigid rules herein required, and made necessary by the nearness of our coast to the tropics.

RULE 10. The station at Sabine Pass will be under the control for quarantine purposes of such health officer and other agents and employés as may be appointed by the county judge and commissioners' court of Jefferson County.

The pass at Galveston to be under the control of the board of health of said city, and such health officer, agents, and employés as they may appoint for quarantine purposes.

The stations at mouths of Bernard and Brazos Rivers and San Louis Pass to be under the control of the county judge and commissioners' court of Brazoria County, and such health officer, agents, and employés as they may appoint.

The station at Aransas Pass and Corpus Christi Pass to be under the control of the authorities of Corpus Christi and such health officer, agents, and employés as they may appoint.

The station at Brazos Santiago and the mouth of the Rio Grande, so far as Texas has a right thereat, to be under the control of the city authorities of Brownsville, and such health officer, agents, and employés as they may appoint. And said authority shall also, whenever it may become necessary for quarantine purposes, make provision for guarding and assuming control of all crossings of the Rio Grande leading to said city, of which, however, notice of its necessity shall forthwith be given to the governor for his sanction or disapproval.

The municipal authorities of the city of Houston, and the board of health appointed by them, if any, to have control of that city, and such other points in Harris County as lead to it, and with authority to appoint a health officer and such employés as may be required, whenever it shall become necessary, and not before, to establish a quarantine there for the protection of that city and the country in rear of it, of which notice is requested to be given to the executive for his action thereon.

RULE 11. In anticipation of the possibility of yellow fever or other infectious disease entering the territory of the United States at some point north of the twenty-fifth degree of north latitude, the following

rate among children is high in proportion to the general mortality, and the cause is to be found in the conditions attending the poverty of the people. The deaths under 5 years are largely due to diseases of the digestive or of the respiratory organs, as in other countries. But *entozoa* are remarkably frequent among the children, and the obsolete term *"febris verminosa"* often appears among the reports of causes of death. Syphilis is extremely rare in the island generally, being almost confined to the port. The system of weekly medical inspection of all known prostitutes is strictly enjoined by the law, but not fully carried out. Leprosy was supposed to have been introduced by the first settlers, and is still found in the southern and western parts of the island. The hospital for this disease usually contains from 7 to 15 patients, but it is estimated that between 400 and 500 persons on the island may be affected with leprosy.

MALTA AND GOZO.—United States Consul C. B. Eynaud reports 141 deaths for the two weeks ending March 15; population, 154,830; annual death-rate, 13.7 per 1,000. No contagious diseases reported.

MELBOURNE, AUSTRALIA.—United States Consul O. M. Spencer reports 465 deaths in December, of which 4 were from cholera, 7 from typhoid fever, and 12 from other contagious diseases. Population, 265,000; annual death-rate, 20.7 per 1,000; mean temperature, 62°.

MONTEVIDEO, URUGUAY.—United States Consul A. L. Russell sends three monthly reports. For November, 1880, there were 214 deaths reported; 1 from small-pox, 2 from typhoid fever, and 5 from other contagious diseases. Population, 111,500; annual death-rate, 23.4 per 1,000. For December, 274 deaths; 9 from typhoid fever and 6 from other contagious diseases; annual death-rate, 29.0 per 1,000. In January there were 302 deaths; 2 from small-pox, 5 from typhoid fever, and 3 from other contagious diseases; annual death-rate, 31.9 per 1,000.

MOSCOW, RUSSIA.—United States Consul A. Weber reports for the month of January a total of 2,214 deaths, of which 265 were from typhoid fever, 25 from small-pox, 26 from scarlet fever, and 90 from other contagious diseases. There were 542 deaths from lung diseases and 215 from diarrhœal diseases. Population, 601,969; annual death-rate, 43.3 per 1,000. Mean temperature, 10°.

NINGPO, CHINA.—United States Consul E. C. Lord reports that measles and small-pox have prevailed during February, but no estimate of cases or deaths can be made.

SAN JUAN, PORTO RICO.—United States Consul E. Conroy reports for the month of February, yellow fever, 4 cases and 1 death; small-pox, 85 cases and 11 deaths; typhoid fever, 5 cases and 1 death. Total deaths, 66; population, 23,240; annual death-rate, 37.0 per 1,000. There has been no rain for six weeks, and the sewers are filled with filth; small-pox is increasing daily.

SANTIAGO DE CUBA.—United States Consul J. C. Landreau sends a report for the month of March, showing 13 cases of yellow fever and 7 deaths; small-pox, 15 cases and 8 deaths; typhoid fever, 10 cases and 5 deaths. Total deaths, 127; population, 40,000; annual death-rate, 38.3 per 1,000. The contagious diseases being among the Spanish troops, and the harbor and vicinity being free from disease, clean bills of health are still issued.

TUXPAN, MEXICO.—Under date of April 1, Dr. A. M. Boyd reports that 17 deaths occurred during the month of March. The population being 7,186, the annual death-rate was 27.0. Among the causes noted were: Consumption, 1; pneumonia, 3; malarial fevers, 6; and accidents, 4. No epidemic or contagious disease has prevailed in the port during the month.

SANITARY LEGISLATION IN NEW JERSEY.

The following act has been passed by the legislature of New Jersey relative to adulteration of food and drugs:

AN ACT to prevent the adulteration of food or drugs.

1. *Be it enacted by the senate and general assembly of the State of New Jersey*, That no person shall, within the State of New Jersey, manufacture, have, offer for sale, or sell any article of food or drugs which is adulterated, within the meaning of this act, and any person violating this provision shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding $50 for a first offense, and $100 for a second and subsequent offenses.

2. *And be it enacted*, That the term "food," as used in this act, shall include every article used for food or drink by man, and that the term "drug," as used in this act, shall include all medicines for internal or external use.

3. *And be it enacted*, That any article shall be deemed to be adulterated within the meaning of this act:

(*a*)—IN THE CASE OF DRUGS.

First. If when sold under or by a name recognized in the United States pharmacopœia, it differs from the standard of strength, quality, or purity laid down therein;

Second. If when sold under or by a name not recognized in the United States pharmacopœia, but which is found in some other pharmacopœia, or other standard work on materia medica, it differs materially from the standard of strength, quality, or purity laid down in such work;

Third. If its strength or purity fall below the professed standard under which it is sold;

(*b*)—IN THE CASE OF FOOD OR DRINK.

First. If any substance or substances has or have been mixed with it, so as to reduce or lower, or injuriously affect its quality or strength;

Second. If any inferior or cheaper substance or substances have been substituted wholly or in part for the article;

Third. If any valuable constituent of the article has been wholly or in part abstracted;

Fourth. If it be an imitation of or be sold under the name of another article;

Fifth. If it consist wholly or in part of a diseased or decomposed or putrid or rotten animal or vegetable substance, whether manufactured or not; or in the case of milk, if it is the produce of a diseased animal;

Sixth. If it be colored, or coated, or polished, or powdered, whereby damage is concealed, or it is made to appear better than it really is, or of greater value;

Seventh. If it contain any added poisonous ingredient, or any ingredient which may render such article injurious to the health of a person consuming it; provided, that the State board of health may, with the approval of the governor, from time to time declare certain articles or preparations to be exempt from the provisions of this act; and provided further, that the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food; provided that the same are not injurious to health, and that the articles are distinctly labeled as a mixture.

4. *And be it enacted*, That the State board of health shall, from time to time, fix the limits of variability permissible in any article of food or drug or compound, the standard of which is not established by any national pharmacopœia.

5. *And be it enacted*, That the State board of health shall take cognizance of the interests of the public health, as it relates to the sale of food and drugs and the adulteration of the same, and make all necessary investigations and inquiries relating thereto; it shall also have the supervision of the appointment of public analysts and chemists, and upon its recommendation, whenever it shall deem any such officers incompetent, the appointment of any and every such officer shall be revoked, and be held to be void and of no effect. Within thirty days after the passage of this act the State board of health shall meet and adopt such measures as shall seem necessary to facilitate the enforcement of this act, and prepare rules and regulations with regard to the proper methods of collecting and examining articles of food or drugs, and for the appointment of the necessary inspectors and analysts; and the said board shall be authorized to expend, in addition to all sums already appropriated for said board, an amount not exceeding $500 for the purpose of carrying out the provisions of this act.

6. *And be it enacted*, That every person selling or offering or exposing any article of food or drugs for sale, or delivering any article to purchasers, shall be bound to serve or supply any inspector appointed under this act, who shall apply to him for that purpose, and on his tendering the value of the same for a sample sufficient for the purpose of analysis of any article which is included in this act and which is in the possession of the person selling, under a penalty not exceeding $50 for a first offense, and $100 for a second and subsequent offense.

7. *And be it enacted*, That any violation of the provisions of this act shall be treated and punished as a misdemeanor, and whoever shall impede, obstruct, hinder, or otherwise prevent any analyst, inspector, or prosecuting officer in the performance of his duty, shall be guilty of a misdemeanor, and shall be liable to indictment and punishment therefor.

8. *And be it enacted*, That any acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

9. *And be it enacted*, That this act shall be deemed a public act, and shall take effect at the expiration of thirty days after it shall become a law.

Approved March 25, 1881.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 23, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me....	Portland.....	33,810	16	24.7	33,480	330	16	.....	24.9	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....
N. H...	Concord.....	13,838	4	15.1	13,771	67	4	.....	15.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt.....	Burlington...	11,364	5	23.0	11,248	116	5	.....	23.2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass..	Boston.....	362,535	163	23.5	356,535	6,000	161	2	23.7	17.4	.....	.....	42	.....	.....	.....	7	.....	.....	.....	29	.....	1	.....
	Cambridge...	52,740	19	18.6	51,222	1,518	19	.....	19.3	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....
	Edgartown...	1,301	.....	.....	1,238	63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Bedford.	26,875	9	17.5	25,349	1,526	9	.....	18.5	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Newburyport	13,537	11	42.3	13,469	68	11	.....	42.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Marblehead..	7,467	5	34.9	7,456	11	5	.....	35.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Nantucket...	3,726	3	41.5	3,657	69	3	.....	42.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Plymouth....	7,094	2	14.7	6,930	164	2	.....	15.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Fall River....	49,006	22	23.4	48,846	160	22	.....	23.5	.....	.....	.....	10	.....	.....	.....	2	.....	2	.....	4	.....	.....	.....
	Lowell.....	59,485	30	26.3	59,307	178	30	.....	26.4	.....	.....	.....	6	.....	.....	.....	1	.....	.....	.....	6	.....	1	.....
	Lawrence.....	39,178	12	16.0	39,026	152	12	.....	16.1	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Pittsfield....	13,367	6	23.4	13,047	320	6	.....	23.9	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
	Worcester....	58,295	28	25.0	57,528	767	28	.....	25.4	.....	.....	.....	10	.....	.....	.....	1	.....	.....	.....	5	.....	.....	.....
	Lynn.....	38,284	7	9.5	37,730	554	7	.....	9.7	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Brockton.....	13,608	3	11.5	13,569	39	3	.....	11.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Holyoke.....	21,851	8	19.1	21,822	29	8	.....	19.1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Bridgewater..	3,620	2	28.9	3,594	26	2	.....	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Milford.....	9,310	4	22.4	9,267	43	4	.....	22.5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Chicopee....	11,323	3	13.8	11,324	1	3	.....	13.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Fitchburg....	12,405	2	8.4	12,368	37	2	.....	8.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Somerville...	24,985	10	20.9	24,906	79	10	.....	21.0	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	2	.....	2	.....
	Springfield...	33,340	10	15.7	32,592	748	10	.....	16.0	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....
	Spencer.....	7,466	.....	.....	7,459	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Quincy.....	10,529	13	64.4	10,438	91	13	.....	64.5	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Northampton.	12,172	4	17.3	12,044	128	4	.....	17.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Haverhill....	18,475	2	5.7	18,306	169	2	.....	5.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Gloucester...	19,329	3	8.2	19,309	20	3	.....	8.2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Chelsea.....	21,785	8	19.0	21,253	532	7	1	17.2	98.0	.....	.....	6	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....
	Beverly.....	8,445	3	19.0	8,421	24	3	.....	19.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clinton.....	8,030	2	13.0	8,019	11	2	.....	13.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Attleborough.	11,109	5	23.5	10,975	136	5	.....	23.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Malden.....	12,017	11	47.8	11,959	58	11	.....	47.9	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Salem.....	27,500	14	26.4	27,396	202	14	.....	26.7	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Taunton.....	21,200	10	24.3	21,102	111	10	.....	24.7	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....
	Westboro'....	5,217	1	10.0	5,178	36	1	.....	10.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Woburn.....	10,938	.....	.....	10,907	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Weymouth....	10,571	2	9.9	10,521	50	2	.....	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Waltham.....	11,711	7	31.0	11,692	19	7	.....	31.0	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Webster.....	5,696	1	9.2	5,652	44	1	.....	9.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Westfield.....	7,587	2	13.6	7,525	62	2	.....	13.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brookline.....	8,053	6	38.8	8,036	17	6	.....	38.9	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....
	Newton.....	16,995	3	9.1	16,780	215	3	.....	9.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I....	Providence..	104,855	50	24.8	101,209	3,646	49	1	25.3	13.7	.....	.....	11	1	.....	.....	1	.....	.....	.....	7	.....	.....	.....
Conn..	New Haven...	62,882	23	19.1	60,654	2,228	21	2	18.0	45.9	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....
	New Britain..	13,978	5	18.7	13,903	75	5	.....	18.8	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Waterbury...	20,269	3	7.7	20,117	152	3	.....	7.8	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Fairfield.....	3,748	2	27.8	3,603	145	2	.....	28.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Norwich.....	21,141	10	24.3	20,579	562	9	1	22.8	92.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
N. Y...	New York....	1,206,577	780	33.7	1,186,144	20,433	757	23	33.2	58.7	.....	.....	293	.....	.....	.....	26	.....	11	.....	106	.....	22	.....
	Brooklyn....	566,689	246	22.7	558,474	8,215	238	8	22.2	50.8	.....	.....	91	4	.....	.....	10	.....	.....	.....	39	.....	9	1
	Yonkers.....	18,892	6	16.6	18,528	364	6	.....	17.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Poughkeepsie	20,207	9	23.3	19,513	694	9	.....	24.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Newburg.....	18,050	5	14.5	17,480	570	5	.....	14.9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Rochester....	89,877	49	28.6	88,845	518	49	.....	28.8	.....	.....	.....	23	.....	.....	.....	.....	.....	1	.....	6	.....	2	.....
	Buffalo.....	155,137	65	21.9	154,292	845	65	.....	21.6	.....	.....	.....	24	.....	.....	.....	6	.....	.....	.....	7	.....	1	.....
	Cambridge....	1,850	1	29.1	1,800	50	1	.....	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Seneca Falls..	5,880	.....	.....	5,839	41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Utica.....	33,923	9	13.9	33,669	244	9	.....	13.9	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Little Falls...	6,940	1	7.4	6,836	74	1	.....	7.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J....	Hudson Co....	187,950	97	26.9	186,254	1,696	.....	.....	.....	.....	.....	.....	43	.....	.....	.....	4	.....	.....	.....	5	.....	6	.....
	Orange.....	13,206	8	31.6	12,749	457	8	.....	32.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Camden.....	41,658	12	15.0	38,064	3,594	12	.....	16.4	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Plainfield....	8,126	5	32.6	7,633	493	5	.....	34.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Asbury Park..	1,640	1	58.4	56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa.....	Philadelphia.	846,980	423	26.1	815,182	31,798	394	29	25.2	47.6	.....	.....	134	.....	.....	.....	8	.....	1	.....	65	4	8	.....
	Pittsburgh...	156,381	81	27.1	152,290	4,091	78	3	26.7	39.1	.....	.....	36	.....	.....	.....	6	.....	5	.....	6	.....	1	.....
	Erie.....	27,736	7	13.8	27,499	237	7	.....	13.2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Del....	Wilmington..	42,499	32	39.3	37,023	5,476	21	11	29.6	104.7	.....	.....	7	2	.....	.....	1	.....	.....	.....	4	2	.....	.....
D. C...	Dist. of Col...	180,000	71	20.5	120,000	60,000	38	33	16.5	28.6	.....	.....	11	18	.....	.....	1	.....	.....	.....	6	8	.....	.....
Va	Norfolk.....	21,966	12	28.5	11,933	10,033	5	7	22.1	35.9	.....	.....	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Richmond....	63,803	32	26.0	35,756	28,047	10	22	14.6	41.3	.....	.....	1	9	.....	.....	.....	.....	.....	.....	2	5	.....	.....
	Lynchburg...	15,959	8	26.2	7,484	8,475	2	6	13.9	37.9	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
W. Va.	Wheeling....	31,266	13	21.2	30,551	715	12	1	20.4	72.9	.....	.....	3	1	.....	.....	1	.....	1	.....	4	.....	1	.....
N. C..	Wilmington..	17,361	7	21.1	6,893	10,468	2	5	15.1	24.8	.....	.....	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C...	Charleston...	49,999	59	52.2	22,713	27,286	24	26	56.0	49.4	.....	.....	3	10	.....	.....	1	1	.....	.....	1	2	.....	.....
Ga.....	Augusta.....	23,023	11	24.9	12,364	10,659	7	4	29.5	19.8	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....
	Atlanta.....	37,421	12	16.5	21,086	16,335	5	7	12.2	22.3	.....	.....	1	3	.....	.....	.....	.....	1	.....	2	.....	.....	.....
	Savannah....	34,879	21	35.7	19,114	15,765	13	8	45.2	25.7	.....	.....	1	2	.....	.....	.....	1	.....	.....	3	.....	.....	.....
	Brunswick...	2,891	.....	.....	1,445	1,446	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla....	Jacksonville.	5,563	2	18.7	3,095	2,468	1	1	17.2	21.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
	Key West....	9,890	2	10.6	6,746	3,144	1	1	7.7	16.5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Ala....	Mobile.....	31,295	12	20.1	16,887	14,368	7	5	21.6	18.2	.....	.....	2	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....
	Selma.....	7,529	2	13.9	3,345	4,184	1	1	15.2	12.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miss..	Columbus....	5,519	3	28.1	1,933	3,586	.....	3	.....	43.5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Natchez.....	7,058	3	22.1	3,421	3,637	2	1	30.3	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Vicksburg....	11,814	9	39.8	5,975	5,839	5	4	44.9	39.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La.....	New Orleans.	216,140	113	27.3	159,128	57,231	81	32	26.9	29.2	.....	.....	29	12	.....	.....	3	.....	2	.....	10	4	.....	.....
	Shreveport...	11,017	2	9.5	3,739	7,276	2	.....	27.8	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Baton Rouge	7,217	2	14.5	2,917	4,300	2	.....	35.8	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Tex....	San Antonio..	20,561	9	23.1	17,525	3,036	9	.....	26.9	.....	.....	.....	5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Austin.....	10,960	4	19.0	7,349	3,611	3	1	21.3	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Waco.....	7,296	5	35.6	4,716	2,580	5	.....	55.1	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Galveston...	22,308	10	23.5	16,909	5,353	6	4	18.1	39.4	.....	.....	3	4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 23, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Tex....	Marshall.....	5,622	2	18 5	2,836	2,786	1	1	18.3	18.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ark ...	Little Rock...	13,185	13	51.4	8,636	4,549	6	7	36.6	79.8	.....	.....	.....	2	.....	.....	.....	.....	1	1	2	1	.....	.....
Tenn ..	Nashville	43,461	17	20.4	27,004	16,457	12	5	23.2	16.1	.....	.....	6	1	.....	.....	.....	.....	1	.....	2	.....	1	.....
	Memphis.....	33,593	37	57.6	18,022	14,971	9	28	25.1	97.4	.....	.....	1	13	.....	.....	.....	3	.....	1	1	3	.....	.....
	Clarksville ...	3,860	2	27.0	2,134	1,726	1	1	24.4	30.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Murfreesboro'	3,800	3	40.8	1,777	2,023	1	2	29.8	49.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Trenton	1,383	2	74.5	828	555	1	1	63.0	93.8	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky	Louisville	123,625	53	22.4	102,842	20,920	39	14	19.8	34.5	.....	.....	10	7	.....	.....	2	.....	.....	.....	10	3	.....	.....
	Bowling Green	5,111	2	20.4	3,254	1,857	1	1	16.0	28.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio ...	Cincinnati	255,708	109	22.2	247,538	8,170	100	9	21.1	58.4	.....	.....	44	1	.....	.....	3	.....	3	.....	22	3	.....	.....
	Cleveland.....	160,140	56	18.3	158,094	2,048	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	4	.....	4	.....	1	.....
	Gallipolis.....	4,400	3	35.4	3,474	926	3	.....	44.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Dayton	38,677	11	14.8	37,684	993	10	1	13.7	54.4	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....
	Portsmouth...	11,314	5	23.2	10,346	968	5	.....	26.1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Ind	Indianapolis ..	75,074	35	24.3	68,558	6,516	30	5	23.0	40.0	.....	.....	12	.....	.....	.....	2	.....	1	1	8	1	1	.....
	Richmond ...	12,743	2	8.2	12,106	637	2	.....	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Evansville....	29,280	9	16.1	26,563	2,717	7	2	13.7	38.4	.....	.....	5	.....	.....	.....	1	1	2	1	1	.....	.....	.....
Ill	Chicago	503,298	241	25.0	496,620	6,684	241	.....	25.3	.....	.....	.....	110	.....	.....	.....	9	.....	8	.....	27	.....	8	.....
	Peoria	29,315	4	7.1	28,821	494	4	.....	7.2	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Aurora	11,825	2	8.8	11,612	213	2	.....	8.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Jacksonville..	10,927	3	14.3	10,222	705	1	2	5.1	140.0	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Elgin	8,770	4	23.8	8,647	142	4	.....	24.0	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Moline.....	7,805	5	33.4	7,673	132	5	.....	34.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....
	Lake	18,396	4	11.3	18,385	11	4	.....	11.3	.....	2,704	3	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wis ...	Milwaukee ...	115,761	64	28.7	115,275	303	64	.....	28.9	.....	.....	.....	33	.....	.....	.....	1	.....	7	.....	6	.....	1	.....
	Beloit.....	4,790	1	10.8	4,696	94	1	.....	11.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mich ..	East Saginaw.	19,065	6	16.5	18,832	184	6	.....	16.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Flint.....	8,410	4	24.8	8,163	247	4	.....	25.6	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lansing	8,319	1	6.3	8,109	210	1	.....	6.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Iowa ..	Keokuk	12,117	4	17.2	11,066	1,051	4	.....	18.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo	Saint Louis..	350,522	184	27.4	328,522	22,000	171	13	27.2	30.9	.....	.....	66	5	.....	.....	8	.....	29	2	27	2	.....	.....
Nebr ...	Omaha.....	30,518	9	15.4	29,680	838	8	1	14.1	62.2	.....	.....	2	1	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
Kans ..	Lawrence.....	8,511	7	42.9	6,515	1,996	6	1	48.0	26.1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....
Colo ..	Boulder.....	3,069	1	17.0	3,024	45	1	.....	17.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cal	San Francisco.	233,956	70	15.6	210,515	23,441	62	8	15.3	18.1	.....	.....	24	.....	.....	.....	.....	.....	.....	.....	8	1	1	.....
	Vallego	6,587	.....	.....	6,303	284	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Los Angeles ..	11,311	5	23.1	10,498	813	5	.....	23.9	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Total	7,941,127	3,806	24.7	.....	.....	.....	.....	.....	.....	.....	.....	1,221	115	.....	.....	114	7	91	8	513	59	70	2

SANITARY INSPECTION AT PORTS ON THE GULF OF MEXICO.

The following letters relate to the quarantine regulations of the ports on the Gulf of Mexico, as regards the action of local boards of health and of the agents of the National Board:

OFFICE OF THE BOARD OF HEALTH,
PORT OF MOBILE, ALA.,
April 19, 1881.

DEAR DOCTOR: I am directed by our board of health to make inquiry of you if it is the purpose of the National Board of Health to obligate all vessels coming from infected or suspected places to report at Ship Island for inspection, &c., before entering any of the Gulf ports. If, out of regard for the jealousies of State and municipal authorities, your Board will not make such exactions, except upon the request of the local boards, I am directed to state that it is the desire of this board that all vessels coming from places of the character above mentioned shall first report to your quarantine station, and, if necessary, there undergo the detention, fumigation, &c., required in the case before entering our bay. If such meets with the approval of the National Board, and we think it is in harmony with the plans proposed for the protection of our coast, we will so inform the consignees of vessels, that they may issue such instructions as will cary out the object to be attained.

We will await your reply before addressing those gentlemen.

Very truly,

E. H. FOURNIER, M. D.,
Health Officer.

T. S. SCALES, M. D.

NATIONAL BOARD OF HEALTH,
SHIP ISLAND QUARANTINE STATION,
April 20, 1881.

SIR: I have to acknowledge the receipt of your communication of the 19th instant, and in reply would state that, in my opinion, if the National Board of Health receives the cordial support of State and local boards of health, a national law will eventually pass *requiring* all vessels from infected and suspected ports within prescribed periods of time to call at this or similar stations for inspection, detention, or purification before being allowed to proceed to port of destination, but at the present time the National Board of Health has not the authority to enforce such requirement.

It appears to me that it is for your honorable board to pass a resolution requiring vessels bound for Mobile from infected or suspected ports—say between the 1st of June and the 1st of November—to call at this station and procure my permit before being allowed to come to your city, and you have accomplished the desired object. Of course it would be necessary to have the resolution published, and to instruct your quarantine physician, harbor-master, and port wardens accordingly. I should like very much to have sent me a printed copy of such resolution if passed.

You know the object of the National Board is to *aid* and *assist* State and municipal boards, but I do not think the authority has ever been vested in said board to enforce the requirements herein alluded to, though I should be pleased if your board would pass the resolution in question, and send us any dangerous shipping that might threaten your sanitary interest; should also be pleased to receive delegates from your body and have them examine the facilities at this station for dealing with such shipping. I hope that I have made myself understood as to the point in question, viz: That, in my opinion, State and municipal boards or authorities have the power to pass resolutions making it a *sine qua non* for vessels from infected and suspected ports, within prescribed periods of time to enter their ports, that they shall first call at this or similar stations and secure the official permits of the officer in charge.

You will observe that I have given you my individual opinion only in relation to the matter, but I shall at once forward to Washington your letter and a copy of this reply.

Most respectfully,

T. S. SCALES, M. D.,
Superintendent.

To Dr. E. H. FOURNIER,
Health Officer, Mobile, Ala.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 23, 1881—Continued.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.													
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
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1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	6	4	Nashville	Tenn.
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1	....	1	....	1	....	....	....	1	....	....	....	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	14	....	Indianapolis	Ind.
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2	....	11	....	....	....	4	....	4	....	2	....	20	....	4	....	12	....	....	....	2	....	4	....	11	....	4	....	109	....	Chicago	Ill.
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1	....	5	....	....	....	....	....	....	....	4	....	3	....	2	....	1	....	....	....	....	....	1	....	....	....	....	....	32	....	Milwaukee	Wis.
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2	....	4	1	1	....	....	....	6	1	1	....	10	2	1	....	2	....	....	....	3	....	5	....	....	....	....	....	72	6	Saint Louis	Mo.
....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	2	....	Omaha	Nebr.
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1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	Los Angeles	
41	7	139	7	23	....	70	4	48	4	141	5	338	45	28	3	112	10	6	1	43	5	38	3	53	17	27	1	1,574	158		

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

The following reports, for the week ending April 23, 1881, are from places where burial permits are not required:

Allegheny, Pa., 78,681; deaths, 31; under 5 years, 13; cerebro-spinal meningitis 2, consumption 5, diphtheria 1, scarlet fever 5, pneumonia 1, puerperal 1. Bath, Me., 8,000; deaths, 3; consumption 2, congestion of lungs 1. Belfast, Me., 5,308; deaths, 1; under 5 years, 1; croup 1. Brattleborough, Vt., 6,000; deaths, 1; pneumonia 1. Bucyrus, Ohio, 3,950; deaths, 3; under 5 years, 2; consumption 1, measles 2. Calais, Me., 6,162; deaths, 1; consumption 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 4; under 5 years, 2. Circleville, Ohio, 5,996; deaths, 6; cerebro-spinal fever 6. Clinton, Mich., 1,200; no deaths. Corinth, Miss., 2,264; deaths, 1. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,327; deaths, 6; under 5 years, 2; cerebro-spinal meningitis 1, diarrhœa 1, malarial fever 1, pneumonia 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Greenville, S. C., 6,500; deaths, 1; under 5 years, 1; congestion of lungs 1. Gunn City, Mo., 135; no deaths. Helena, Mont., 3,630; deaths, 2; under 5 years, 1; diphtheria 2. Hernando, Miss., 1,000; deaths, 6; diphtheria 3, pleurisy 1, measles 1. Huntingdon, Pa., 4,500; deaths, 1; under 5 years, 1. Huntingdon, Tenn., 1,200; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,250; deaths, 4; under 5 years, 1; cerebro-spinal meningitis 2, puerperal 1, measles 1. Kenosha, Wis., 5,500; deaths, 1; consumption 1. La Salle, Ill., 8,885; deaths, 2; under 5 years, 1; consumption 1, cerebro-spinal meningitis 1. Louisiana, Mo., 5,000; deaths, 1; pneumonia 1. Madison, Ind., 9,009; deaths, 5; consumption 2, croup 1. Martinsburg, W. Va., 6,434; deaths, 2; consumption 1. Meridian, Miss., 4,013; no deaths. Milan, Tenn., 1,800; deaths, 1; measles 1. Milledgeville, Ga., 3,000; deaths, 2; consumption 1, pneumonia 1. Muscatine, Iowa, 8,412; deaths, 4; cerebro-spinal meningitis 1, consumption 1, scarlet fever 1. Muskegon, Mich., 11,300; deaths, 7; under 5 years, 4; pneumonia 3, congestion of lungs 1, bronchitis 1, puerperal 1. Niles, Mich., 4,200; deaths, 2; malarial fever 1. Ocala, Fla., 1,000; no deaths. Painesville, Ohio, 5,504; deaths, 3; consumption 2. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; deaths, 1; puerperal 1. Port Royal, S. C., 750; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 21,000; deaths, 11; under 5 years, 3; consumption 4, diphtheria 1, whooping cough 1. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; deaths, 1; consumption 1. Tuskaloosa, Ala., 2,000; deaths, 2. Winchester, Va., 5,000; deaths, 6; under 5 years, 3; bronchitis 3. Youngstown, Ohio, 15,421; deaths, 13; under 5 years, 5; cerebro-spinal meningitis 6, typhoid fever 1, malarial fever 1, pneumonia 1, puerperal 1. Total population, 301,695; deaths under 5 years, 40; total number of deaths, 133; annual rate per 1,000, 23.0.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	Apr. 16	2	23.2													54
Canada	Montreal	135,000	Apr. 2	71	27.4								5				3	29
Do	....do	135,000	Apr. 9	64	24.7								3				7	28
Do	....do	135,000	Apr. 16	71	27.4												7	38
Do	Kingston	16,000	Apr. 23	2	6.5													44
West Indies	Bermudas	14,867	Apr. 27	3	10.5							1						68
Cuba	Havana	195,437	Apr. 16	194	51.8						32		30					76
Guadaloupe	Pointe à Pitre	22,920	Mar. 19	27	61.3				7									
Do	....do	22,920	Apr. 9	17	38.6				2									
Hayti	San Domingo	10,000	Mar. 13	5	26.1													82
Do	....do	10,000	Mar. 20	4	20.8													82
Do	....do	10,000	Mar. 27	7	36.4													83
Do	.... do	10,000	Apr. 3	5	26.1													83
Do	....do	10,000	Apr. 10	10	52.2													85
Do	....do	10,000	Apr. 17	6	31.2					2	1							85
Bahamas	Turk's & Caicos Isl'ds	3,500	Mar. 19															78
Do	....do	3,500	Mar. 26															78
Do	....do	3,500	Apr. 3	1	14.9													77
Do	.... do	3,500	Apr. 10	1	14.9													79
Do	....do	3,500	Apr. 17	1	14.9													81
Do	....do	3,500	Apr. 23	2	29.8													81
Mexico	Matamoras	16,000	Apr. 16	12	39.1						3							
Do	Vera Cruz	20,000	Apr. 2	26	68.6				6		4							73
Do	....do	20,000	Apr. 9	27	71.3				8		2							77
St. Helena	Jamestown	6,241	Mar. 19	2	16.7													82
Do	....do	6,241	Mar. 26	2	16.7													82
Scotland	Leith	59,958	Apr. 16	23	19.6												3	44
England	London	3,707,180	Apr. 9	1,532	21.5						72		11				130	40
Do	Liverpool	549,834	Apr. 16	293	27.7							3	2	46	11		21	50
Do	Tunstall	27,775	Apr. 9	10	18.7													47
Do	....do	27,775	Apr. 16	8	15.0													54
Do	Sheffield	304,938	Apr. 16	148	25.3													47
Do	Cardiff	83,389	Apr. 16	31	19.4								1				3	51
France	Lyons	342,815	Apr. 2	191	29.0	12							4				7	
Do	Rouen	104,209	Apr. 16	100	49.7													
Switzerland	Geneva	50,233	Apr. 9	18	18.5													
Do	Zurich	25,329	Apr. 9	5	10.3													
Holland	Amsterdam	316,952	Apr. 9	159	26.1										1		2	39
Do	Rotterdam	152,515	Apr. 16	72	24.5							2				14	1	
Germany	Berlin	1,123,571	Apr. 2	547	24.8					7	2	6	3			113	60	40
Do	Bremen	112,200	Apr. 2	56	27.0												8	
Do	Barmen	95,000	Apr. 9	48	26.8												28	43
Do	Breslau	273,000	Apr. 2	176	33.6								3				17	38
Do	Brunswick	75,000	Apr. 9	36	25.2													34
Do	Cologne	144,735	Apr. 9	61	21.9								2				7	
Bavaria	Munich	230,000	Apr. 9	158	31.7						3		2				11	
Saxony	Dresden	220,216	Apr. 2	122	28.7													39
Do	Chemnitz	95,135	Apr. 2	68	37.2								1					39
Do	Leipsic	151,617	Apr. 9	63	21.4													37
Italy	Leghorn	98,234	Apr. 9	40	21.2													64
Do	Genoa	185,000	Apr. 16	85	23.0									2	1			65
Austria	Vienna	731,191	Apr. 9	487	34.0						33		4				13	40
Roumania	Bucharest	177,646	Apr. 9	107	31.4								6		1		1	
Russia	Warsaw	379,763	Apr. 2	183	25.0						2							36
Norway	Christiania	120,000	Apr. 2	39	18.7					1		7				6	1	24
Spain	Seville	138,000	Apr. 3	56	21.1												8	70
Do	....do	138,000	Apr. 10	67	25.3										1		11	70
Egypt	Alexandria	220,000	Apr. 1	119	28.2													
Cape Colony	Cape Town	35,000	Mar. 28	25	37.2													82
East Indies	Calcutta	429,535	Mar. 12	286	34.7	55				6		16					8	76
Do	do	429,535	Mar. 19	227	27.5	46				2		18					5	76
Japan	Kobé	19,248	Mar. 19	9	24.4													40
Do	....do	19,248	Mar. 26	9	24.4													45

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

THE NATIONAL BOARD OF HEALTH.

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National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, MAY 14, 1881. [No. 46.

REPORT OF A COMMITTEE OF THE SANITARY COUNCIL OF THE MISSISSIPPI VALLEY.

SANITARY COUNCIL, MISSISSIPPI VALLEY,
Office of the Secretary, April 23, 1881.

SIR: In pursuance of instructions, I herewith forward you copies of reports of committees as adopted by the Sanitary Council of the Mississippi Valley at its recent meeting in the city of Evansville, Ind., April 20–21, with the request of the council that the same be published in the BULLETIN of the National Board of Health, at an early date, for the prompt information of health organizations throughout the country.

Copies of the addresses delivered at the meeting will also be forwarded you as soon as the corrected manuscripts are received from the various authors. It is desired that, if within the scope of the BULLETIN, these also be published in a future number.

Very respectfully,

JOHN H. RAUCH, M. D.,
Secretary of the Council.

Dr. T. J. TURNER, U. S. N.,
Secretary National Board of Health, Washington, D. C.

Report of a committee of the Sanitary Council of the Mississippi Valley on certain topics of the project of business submitted for the action of the council by the president, R. C. Kedzie, M. D., of Lansing, Mich.

MR. PRESIDENT: Your committee, to which was referred sundry subjects for discussion and formulation, and which subjects are hereinafter recited, begs leave to report that it has had the various propositions under consideration, and now offers for the action of the council the following resolutions, as embodying the views of the committee:

First. Representatives of the National Board to reside at quarantine station on the Mississippi River. Also, a representative to reside at New Orleans, with the privilege of access to the records of the State board of health, and to attend their meetings.

Resolved, That the Sanitary Council of the Mississippi Valley reaffirms the action had at its December, 1880, meeting in New Orleans; demands that the Louisiana State board of health invite the appointment and maintenance by the National board of health of inspectors at New Orleans, at Eadsport, and at the Mississippi quarantine station; and announces that in the event of any failure on the part of the said State board of health of Louisiana to act in good faith toward said inspectors then the boards of health represented in this council will be compelled to take into their own hands the protection of the health of their own people.

Second. Arrangement of the work of inspectors of railroads and steamboats, the inspection at the mouth of the river, and ordering infected vessels to Ship Island.

Resolved, That the inspection service of river and rail transportation by the National Board of Health is hereby indorsed, and its reestablishment for the ensuing season is urged, with the compact on behalf of the representatives in this council that the certificates and bills of health issued by said inspection service shall be accepted as *prima facie* evidence of the sanitary status of vessels and trains presenting the same.

Resolved, That this council, being firmly convinced that the safety of New Orleans, as well as of the valley, lies in the rigid exclusion of infected ships from the Lower Mississippi, strenuously urges upon the State board of health of Louisiana the modification of section 6 of its "rules and regulations for the government of quarantine officers and stations," etc., so as to read:

SEC. 6. All vessels from ports in which yellow fever is prevailing, or from ports where other contagious or infectious diseases are reported to exist, shall be inspected at Eadsport, and if any such be found to be infected or to furnish reasonable ground for suspicion of infection, such vessel shall not be allowed to pass Eadsport northwise, except upon presentation of a certificate from the inspector of the National Board of Health at the Ship Island quarantine station, setting forth that the vessel has been subjected to proper treatment and is free from liability of conveying contagion.

Resolved, That, in the judgment of this council, the quarantine of vessels and freight should consist of purification of the vessel and its contents, which should then be returned to commerce as speedily as practicable, and that any arbitrary detention beyond the time necessary for such purification is not only unnecessary, but positively increases the danger of propagating and spreading infection.

Third. The means of informing the board of health in the valley of apprehended danger.

Resolved, That this council condemns all methods of suppression and secrecy with reference to information of contagious or infectious diseases, and therefore discountenances the use of cypher telegrams; but in the event of danger from such diseases at any point in the Mississippi Valley, it is the duty of the executive officer of the health organization of such place to fully and promptly advise the proper authorities at all threatened points.

In addition to the foregoing your committee respectfully submits that it is now a well settled opinion of sanitary authorities that quarantine for yellow fever, especially in latitudes subject to the epidemic prevalence of that disease, *should never be located on the mainland*. The peculiar manner of extension of that pestilence over contiguous territory renders an insular position of hospitals in which the sick are treated and buildings to which infected cargoes are removed absolutely essential to secure perfect safety to surrounding communities. States and municipalities which have organized their quarantine establishments by removing them from the mainland to uninhabited islands have had the happiest results. It was to secure this great and practicable reform in the management of the Mississippi quarantine that certain propositions were made to the State board of health of Louisiana.

Although in the quarantine system of the Lower Mississippi it is so manifest as to scarcely require argument, yet it is due the council that we should briefly discuss the following propositions:

1. *The present quarantine establishment is wholly unfit for the reception of yellow fever patients, for the detention of persons exposed to yellow fever, or for the care of infected cargoes.*

A. For the care of yellow fever patients we hold that the hospital must be located on an island in order to give the greatest security against the spread of yellow fever. It is no sufficient argument to allege that yellow fever has never yet spread from the hospital at the Mississippi quarantine. The proofs of the allegation are by no means convincing, as there are many circumstances vitiating that conclusion. But even if it were true, the movements of the population on the Lower Mississippi are rapidly changing the neighborhood of the quarantine. One of these settlements is within a few hundred yards of the station. A large population of negroes is accumulating on the banks of the Lower Mississippi, whose habits of living render the reception and propagation of yellow fever a matter of the greatest certainty.

B. The detention of the well who have been exposed to yellow fever at the Mississippi quarantine should no longer be allowed. It is located on the banks of the Mississippi, is but a few feet above the level of the Gulf of Mexico, and is protected from the overflow of the river by levees. According to the report of Dr. Joseph Jones, the inhabitants of this region are annually liable to visitations of the malignant malarial and hœmorrhagic fevers of the alluvial regions in tropical, semi-tropical, and temperate countries, and these fevers are becoming more and more violent annually, owing to the rapid increase of the acreage of rice-culture. The fear of being confined in the buildings on the quarantine grounds, owing to the danger of contracting malarial fever, is often expressed by seamen familiar with the history of those subjected to detention.

C. The same objection to the lightering of infected cargoes and their storage in warehouses applies as to the care of yellow fever patients on the mainland. Such transfer of cargoes and their subsequent disinfection must be undertaken at island warehouses if we would secure the greatest possible immunity from the spread of infection.

2. *A quarantine establishment is now provided at Ship Island, having a convenient location on an uninhabited island, and fully furnished with every necessary convenience and appliance for the treatment of yellow fever patients, for the care and comfort of persons exposed to infection, the disinfection and storage of disinfected cargoes, and immediate and thorough cleansing and purification of ships.*

Unsuitable as the Mississippi quarantine is for the protection of the valley against the importation of yellow fever infection, there has been no method of supplementing its defects until the Ship Island quarantine was established by the general government. This quar-

antine fully meets all of the requirements which science and skill demand to render the Gulf coast defenses against the introduction of yellow fever complete. From the publications of the National Board of Health we learn the following facts in regard to this quarantine:

Ship Island was selected for a government quarantine because: 1st. "it belonged to the United States Government." 2d. It was uninhabited. 3d. Its conformation permitted the location of the several departments so as to secure complete isolation of each from the other. 4th. It afforded safe anchorage. 5th. It was convenient to the largest extent of quarantine coast, viz, from Pensacola to the mouth of the Mississippi. 6th. The objects sought to be accomplished by this quarantine were simply co-operative with the local quarantine of the adjacent coast.

It does not supersede existing local quarantine except as far as it provides for all the desideratum of the quarantines of that region, an insular location where vessels infected with yellow fever with their passengers, crews, and cargoes can be safely, promptly, and adequately cared for with the least possible danger of spreading the disease.

This establishment is now fully equipped with every necessary appliance to give proper care and treatment to the sick of yellow fever, to isolate with every needful comfort those detained for observation, adequate warehouses for the storage of infected cargoes, and every necessary means for the thorough purification of ships.

3. *It is alleged against this quarantine*: (*a*) *that it does not prevent the passage of infected vessels into the harbors of the coast*; (*b*) *that it is too distant from important points, as the mouth of the Mississippi*; (*c*) *that if recognized and made part of the quarantine system of the Gulf coast it would seriously obstruct commerce.*

a. The Ship Island quarantine is not a station for the interception of passing vessels, but is designated solely to care for infected ships. The duty of intercepting vessels properly belongs to the local quarantines, and if vigilantly performed by them no infected ship, baggage, or cargo would hereafter ever reach the mainland of that coast.

b. The distance of Ship Island from the mouths of the Mississippi is no valid argument against sending infected ships to that quarantine, in view of the absence of all suitable provisions for treating them at the Mississippi quarantine, and of the imminent danger which follows their passage up the river to that station. We must insist that a ship infected with yellow fever is contraband of quarantine, and must be completely relieved of its disability before it is allowed again to enter the ports of the Gulf. Half-way measures of purification should no longer be tolerated.

c. The statement that if infected vessels bound to New Orleans must first go to Ship Island for cleansing and disinfection the commerce of that city would be injured, cannot be sustained by any facts. It appears from the report of Dr. Joseph Jones, president of the State board of health of Louisiana, that 1,271 vessels passed the Mississippi station in 1880; of these but 151 were detained for purification, disinfection, and fumigation, and of these latter but one proved to be an infected vessel. It follows that if the quarantine officer had sent all infected vessels arriving at the Mississippi station during the year 1880, but one vessel out of 1,271 would have had that destination. It is absurd, therefore, to presume that if the health authorities of the State of Louisiana were to regard the Ship Island quarantine as the proper destination of infected vessels bound for New Orleans, the foreign commerce of that city would be impaired. On the contrary, facts prove that the passage of that one vessel to the wharves of New Orleans proved a source of imminent danger to all of its inland traffic.

In conclusion, your committee desires to express the firm conviction that the Ship Island quarantine meets a want of the local quarantines of that part of the Gulf coast which cannot be superseded by any amount of vigilance, nor by any stringency of rules of such quarantines.

We believe, therefore, that this council should adopt, and as far as possible secure the enforcement of, the proposition that an officer should be stationed at Port Eads who shall be required to send all vessels infected with yellow fever to the Ship Island quarantine.

In the same connection we would add that it is important that all of the local quarantines from Mobile to the mouths of the Mississippi be requested to send vessels infected with yellow fever to that quarantine for treatment.

In order to secure the protection which the council seeks, it is evident from the attitude of some of the officers of the local quarantines of that section of the coast that co-operation in this plan can be secured only by the intervention of some central authority which can harmonize conflicting opinions and interests. This authority is found in the President of the United States, and it is the opinion of your committee, formed after mature deliberation, that under the circumstances adequate protection against the importation of yellow fever into the Mississippi Valley during the approaching season cannot be assured except by an appeal to the President to exercise jurisdiction over the quarantines of the coast. To this end your committee submits for the consideration of the council the following resolutions:

Resolved, 1. That there is good reason to believe that the infection which causes yellow fever has been exterminated from the soil of the United States by the extreme cold of the past winter, and that any future outbreak of that pestilence in this country must be due to a fresh importation from foreign countries of the infected matter which causes the disease.

2. That it is therefore of the greatest importance to the business interests of the country, and to the health and happiness of the people, especially of those living in districts liable to be visited by this scourge, that every avenue through which it may reach our shores be effectually guarded.

3. That as yellow fever can reach this country from foreign ports only through our own seaports, the necessity of quarantine establishments on the South Atlantic and Gulf coasts, so organized and administered as to be most effective against the introduction of yellow fever and least obstructive to commerce and travel, is an imperative necessity.

4. That as representatives of the public health interests of the States of the Mississippi Valley, we especially recognize the importance of a more thorough and effective organization and administration of the quarantines of the Gulf coast, and particularly of that at the mouth of the Mississippi River, the great water-way of commerce and travel for the people of the valley.

5. That the experience of the past teaches that the quarantines of that coast, and especially that on the Lower Mississippi, cannot be relied on to prevent the introduction of yellow fever into the valley of the Mississippi, and that therefore immediate measures should be taken to so improve their management that all the resources of science and of human skill shall be applied to prevent another invasion of yellow fever through that channel.

6. That considering the vast social, commercial, and industrial interests involved in the prevention of the introduction of yellow fever at the mouth of the Mississippi River this season, the management of that quarantine is a matter of grave national concern, and should lead to such action of the general government as will give the greatest effectiveness to its administration.

7. That, with a view to accomplish the objects set forth in the preceding resolutions most speedily and directly, the President of the United States be, and is hereby, respectfully but earnestly requested to ascertain at the earliest practical moment whether any, and, if so, what additional rules and regulations are required to render the quarantines of the Gulf coast, and especially that at the mouth of the Mississippi River, effective in preventing the introduction of yellow fever into the United States, and if additional rules and regulations are required that they be immediately made and duly enforced during the approaching quarantine season.

8. That a committee consisting of one member from each State represented in this association be appointed, of which the president shall be the chairman and the secretary shall be the secretary, to lay these resolutions before the President of the United States and to urge immediate action thereon.

All of which is respectfully submitted.

T. G. BIRCHETT, *of Mississippi.*
GUSTAVE DEVRON, *of Louisiana.*
D. H. DUNGAN, *of Arkansas.*
G. W. FOOTE, *of Illinois.*
D. B. HILLIS, *of Iowa.*
H. G. JONES, *of Indiana,*
R. C. KEDZIE, *of Michigan.*
A. J. MILES, *of Ohio.*
J. J. SPEED, *of Kentucky.*
J. M. TARBELL, *of Florida.*
J. D. PLUNKET, *of Tennessee, Chairman.*

The report as read was accepted, and the resolutions were unanimously adopted by the council. In obedience to the eighth resolution, the following members were appointed a committee to lay the report and the resolutions before the President of the United States, and to urge immediate action thereon.

F. R. MICHEL, *of Alabama.*
A. L. BREYSACHER, *of Arkansas.*
S. C. COBB, *of Florida.*
J. H. RAUCH, *of Illinois,*
Secretary of the Committee.
THAD. W. STEVENS, *of Indiana.*
W. S. ROBERTSON, *of Iowa.*
PINKNEY THOMPSON, *of Kentucky.*
C. B. WHITE, *of Louisiana.*
R. C. KEDZIE, *of Michigan.*
D. W. HAND, *of Minnesota.*
WIRT JOHNSTON, *of Mississippi.*
J. SPIEGELHALTER, *of Missouri.*
A. J. MILES, *of Ohio.*
J. D PLUNKET, *of Tennessee.*
D. S. SWEARINGEN, *of Texas.*
O. W. WIGHT, *of Wisconsin.*
J. J. SPEED,
President of the Council, Chairman of the Committee.

Report of a committee of the sanitary council on methods of securing harmony and concert of action by State and municipal health organizations in the Mississippi Valley.

Whereas experience has shown that no uniformity or concert of action can be secured by the arbitrary regulations of municipal

boards of health in arresting the spread of yellow fever: therefore, be it—

Resolved, That it is the sense of this council that the adoption by State and municipal health organizations of this valley of the rules and regulations of the National Board of Health as published, furnishes a practical basis for harmonious action if yellow fever or other infectious or contagious disease prevail at any point tending to spread.

GUSTAVE DEVRON,
Chairman, on behalf of the Committee.

The report was accepted and the preamble and resolution were unanimously adopted.

The following resolutions were also offered and unanimously adopted by the council:

By Dr. J. H. Rauch: *Resolved*, That the representatives from Memphis, Vicksburg, and New Orleans be invited to state to the council what has been done during the past year in their respective cities in the way of sanitary work; and in the case of Memphis, to what extent the recommendations of the National Board of Health for the sanitary regeneration of that city have been carried out.

The verbal statement concerning Memphis not being considered satisfactory by the council, a supplementary resolution was adopted, to wit:

By Dr. Pinkney Thompson: *Resolved*, That the secretary be instructed to address a letter to the president of the taxing district and the president of the board of health of Memphis asking for a statement in detail of the sanitary work actually performed since the close of the epidemic in 1879, and the extent to which the recommendations of the committee of the National Board of Health in regard to the sanitary regeneration of Memphis have been carried out—the secretary to furnish the correspondence to the press for publication.

By Dr. J. J. Speed: *Resolved*, That the sanitary council of the Mississippi Valley indorses and approves the action of the boards of health of the States of Mississippi and Tennessee, and of the cities of Vicksburg and Memphis, in the recent enactment of health ordinances and regulations for the ensuing year.

By Dr. Plunket: That the secretary of the sanitary council be, and he is hereby, instructed to furnish the reports of the committees which have been adopted at this session to the secretary of the National Board of Health with a request that said reports be published in the BULLETIN of said board, for the prompt information of the various health organization of the country.

By Dr. H. G. Jones: *Resolved*, That the health organizations, State and municipal, represented in the Sanitary Council of the Mississippi Valley be, and are hereby, requested to use their influence with the members of Congress of their respective districts to secure adequate appropriations of money for the use of the National Board of Health, to the end that said board may be enabled to carry out the measures it has already inaugurated for the protection of the public health and the consequent advancement of the material prosperity of this region.

—

A meeting of the committee appointed by the quarantine convention, in the city of New Orleans, December 7–10, 1880, was held in Evansville, Ind., April 21, 1881, and the following resolution unanimously adopted:

Resolved, That it is the sense of this committee that the quarantine regulations formulated by the Sanitary Council of the Mississippi Valley, and subsequently revised, adopted, and published by the National Board of Health, are ample and cover the ground entirely for all present needs in the Ohio and Mississippi valleys.

ILLINOIS STATE BOARD OF HEALTH,
Springfield, May 3, 1881.

At a meeting of the Illinois State board of health held on April 29, 1881, the following resolutions offered by Dr. Haskell were unanimously adopted:

Resolved, That the State board of health of Illinois regard it as absolutely essential to the protection of the Valley of the Mississippi from the incursion of epidemic visitations of yellow fever, that there should be cordial co-operation between the National and the State health authorities of the Valley States, and that, to this end, we regard it as vitally important that the State boards of health in the Mississippi Valley should invite the National Board to place its inspectors at such points within their jurisdiction as, in the judgment of the National Board, the sanitary interests of the public may require, and that these inspectors should be encouraged by the various State health authorities to make the most thorough investigation of all matters affecting the public health.

Resolved, That a copy of the above resolution be forwarded to the president of the National Board of Health and the presidents of the State boards of health of the Mississippi Valley.

JOHN H. RAUCH, *Secretary.*

SANITARY LEGISLATION IN WISCONSIN.

APPLETON, WIS.—Dr. E. L. Griffin, under date of May 4, forwards a copy of the following act of legislature of that State relating to contagious diseases:

The State board of health desires to call attention to the following important law, and requests all public health officers, physicians, and agents of transportation companies to extend a knowledge of its provisions, and to aid in its enforcement:

[An act to prevent the spread of contagious, infectious, and pestilential diseases.]

The people of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

SECTION 1. Any person who shall bring, knowingly aid in bringing or cause to be brought, by railroad, steamboat, sailing vessel, stage-coach, or other public or private conveyance, into any town, village, or city of the State of Wisconsin, the body of a deceased person, unless such dead body is accompanied by the written or printed certificate of a physician or coroner, clearly stating the cause of death, and unless, when the cause of death is small-pox, diphtheria, scarlet fever, or other dangerous, contagious, infectious, or pestilential disease, such dead body is also accompanied by the written or printed permit of a lawfully-constituted public-health authority, and by the sworn declaration of an undertaker in writing, that the body of the person deceased as aforesaid is hermetically inclosed in an air-tight metallic coffin, or is encased with an abundance of powerful disinfectants according to the written or printed directions of said public-health authority, so as to render the same entirely innocuous, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than fifty dollars, nor more than three hundred dollars, or by imprisonment in the county jail not less than twenty days, nor more than one hundred days.

SEC. 2. Agents and employés of incorporated transportation companies, and public or private carriers of whatsoever name or nature, shall not receive for transportation, nor transport, the dead body of any person, except on receipt of duly executed papers, showing that the conditions required by section 1 of this act have been complied with under the same penalties as therein provided.

SEC. 3. Any physician, or any person assuming to act as a physician, who shall issue a false certificate whereby a case of small-pox, diphtheria, scarlet fever, or other dangerous, contagious, infectious, or pestilential disease may be concealed, shall be deemed guilty of a misdemeanor, and shall, on conviction thereof, be punished by a fine of not less than fifty dollars, nor more than three hundred dollars, and by imprisonment in the county jail not less than twenty days, nor more than one hundred days; and the ignorance of an uneducated practitioner of medicine shall not be pleaded in justification or extenuation of his offense.

SEC. 4. Any person knowingly laboring under small-pox, diphtheria, scarlet fever, or other dangerous contagious, infectious, or pestilential disease, who shall willfully enter a public place or a public conveyance, or shall in any way willfully subject others to danger of contracting his disease, or any person who shall knowingly and willfully take, aid in taking, or cause to be taken, a child or other irresponsible person, while laboring under any of the aforesaid diseases, into a public place or public conveyance, or shall in any way knowingly and willfully subject others to danger of contracting any of the aforesaid diseases from such child or irresponsible person, or any person who shall knowingly and willfully subject others to danger of contracting any of the aforesaid diseases from the body of a person deceased thereof, or any person who shall in any way knowingly and willfully expose, aid in exposing, or cause to be exposed, a child or other irresponsible person to danger of contracting any of the aforesaid diseases, shall be deemed guilty of a misdemeanor, and shall be subject to the same penalties as are provided in section 1 of this act.

SEC. 5. Upon complaint, made in writing, under oath, before any magistrate or justice of the peace, charging the commission of an offense against the provisions of this act in his county, it shall be the duty of the district attorney to prosecute the offender.

SEC. 6. This act shall take effect from and after its passage and publication, and all acts and parts of acts conflicting with the provisions of this act, in so far as they contravene the same, are hereby repealed.

Approved March 23, 1881.
Published March 26, 1881.

MISSISSIPPI CITY, *May* 3, 1881.—The following resolution was passed by the board of health of Harrison County, Mississippi, at their meeting of May 2, 1881:

Resolved, by the board of health for Harrison County, Mississippi That on and after the 15th day of May, 1881, all vessels arriving at the ports of said county, from infected ports, shall be subject to a quarantine of ten (10) days or more, at the discretion of the health officer; said quarantine to continue until otherwise ordered.

A true copy from the minutes.

F. S. HEWES, *Secretary.*

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 30, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	18	27.8	33,480	330	18	.....	27.9	.....	.....	.....	4	.....	.....	.....	2	...	...	...	4	...	...	...
	Bangor	16,857	4	12.4	16,764	93	4	.....	12.4	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	1	...	...	...
N. H	Concord	13,838	6	22.6	13,771	67	6	.....	22.7	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	2	...	...	...
Vt	Burlington	11,364	3	13.8	11,248	116	3	.....	14.0	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	2	...	...	...
Mass	Boston	362,535	188	27.1	356,535	6,000	183	5	27.0	43.5	.....	.....	50	1	.....	.....	8	...	...	...	32	1	4	...
	Cambridge	52,740	17	16.7	51,222	1,518	17	.....	18.3	.....	.....	.....	6	.....	.....	.....	1	...	...	...	3	...	...	...
	Edgartown	1,301	.....	.....	1,238	63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	New Bedford	26,875	11	21.4	25,349	1,526	11	.....	22.6	.....	.....	.....	3	.....	.....	.....	1	...	...	...	...	...	1	...
	Newburyport	13,537	12	46.2	13,469	68	12	.....	46.3	.....	.....	.....	4	.....	.....	.....	1	...	...	...	1	...	1	...
	Marblehead	7,467	1	7.0	7,451	16	1	.....	7.0	.....	.....	.....	1	.....	.....	.....	...	...	...	...	...	...	...	...
	Plymouth	7,094	1	7.4	6,930	164	1	.....	7.5	.....	.....	.....	1	.....	.....	.....	...	...	...	...	...	...	...	...
	Fall River	49,006	22	23.4	48,846	160	22	.....	23.6	.....	.....	.....	9	.....	.....	.....	...	...	1	...	6	...	...	...
	Lawrence	39,178	10	13.3	39,026	152	10	.....	13.4	.....	.....	.....	6	.....	.....	.....	...	...	...	...	1	...	1	...
	Lowell	59,485	18	15.8	59,307	178	18	.....	15.9	.....	.....	.....	5	.....	.....	.....	...	...	1	...	5	...	...	...
	Pittsfield	13,367	7	27.3	13,047	320	7	.....	23.6	.....	.....	.....	2	.....	.....	.....	2	...	...	...	2	...	...	...
	Worcester	58,295	25	22.3	57,528	764	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	2	...	1	...	3	...	...	...
	Lynn	38,284	13	17.7	37,730	554	13	.....	17.9	.....	.....	.....	4	.....	.....	.....	...	...	...	...	...	...	1	...
	Brockton	13,608	8	30.7	13,569	39	8	.....	30.7	.....	.....	.....	2	.....	.....	.....	...	...	...	...	1	...	...	...
	Holyoke	21,851	9	21.5	21,822	29	9	.....	21.5	.....	.....	.....	1	.....	.....	.....	...	...	4	...	3	...	...	...
	Bridgewater	3,620	.....	.....	3,594	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Milford	9,310	5	28.0	9,267	43	5	.....	28.1	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	1	...	...	...
	Chicopee	11,325	7	32.2	11,324	1	7	.....	32.2	.....	.....	.....	2	.....	.....	.....	...	...	...	...	1	...	...	...
	Fitchburg	12,405	10	42.0	12,368	37	10	.....	42.0	.....	.....	.....	1	.....	.....	.....	...	...	...	...	1	...	...	...
	Somerville	24,985	7	14.6	24,906	79	7	.....	14.6	.....	.....	.....	3	.....	.....	.....	...	...	...	...	1	...	...	...
	Springfield	33,340	13	20.3	32,592	748	13	.....	20.8	.....	.....	.....	2	.....	.....	.....	...	...	2	...	3	...	...	...
	Spencer	7,466	1	7.0	7,459	7	1	.....	7.0	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	1	...	...	...
	Quincy	10,529	4	19.8	10,438	91	4	.....	19.8	.....	.....	.....	2	.....	.....	.....	...	...	...	...	...	...	...	...
	Northampton	12,172	3	13.0	12,044	128	3	.....	13.2	.....	.....	.....	1	.....	.....	.....	...	...	...	...	...	...	...	...
	North Adams	10,192	5	25.7	10,133	59	5	.....	25.7	.....	.....	.....	3	.....	.....	.....	...	...	...	...	...	...	...	...
	Haverhill	18,475	6	17.0	18,366	109	6	.....	17.0	.....	.....	.....	2	.....	.....	.....	...	...	...	...	...	...	...	...
	Gloucester	19,329	2	5.5	19,309	20	2	.....	5.5	.....	.....	.....	2	.....	.....	.....	...	...	...	...	...	...	...	...
	Chelsea	21,785	9	21.3	21,253	532	9	.....	22.1	.....	.....	.....	3	.....	.....	.....	...	...	...	...	3	...	...	...
	Clinton	8,030	2	13.0	8,019	11	2	.....	13.0	.....	.....	.....	.....	.....	.....	.....	1	...	...	...	...	...	...	...
	Beverly	8,445	6	37.9	8,421	24	6	.....	37.9	.....	.....	.....	2	.....	.....	.....	...	...	...	...	1	...	1	...
	Attleborough	11,111	4	18.7	10,975	136	4	.....	19.0	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Malden	12,017	4	17.4	11,959	58	4	.....	17.4	.....	.....	.....	1	.....	.....	.....	...	...	...	...	...	...	...	...
	Salem	27,500	7	13.2	27,396	202	7	.....	13.3	.....	.....	.....	1	.....	.....	.....	...	...	...	...	1	...	...	...
	Taunton	21,213	2	4.9	21,102	111	2	.....	5.0	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	1	...	...	...
	Westboro'	5,214	3	29.9	5,178	36	3	.....	30.0	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	1	...	...	...
	Woburn	10,938	5	23.9	10,907	31	5	.....	23.9	.....	.....	.....	2	.....	.....	.....	...	...	...	...	1	...	...	...
	Weymouth	10,571	8	39.6	10,521	50	8	.....	39.7	.....	.....	.....	2	.....	.....	.....	...	...	...	...	2	...	...	...
	Waltham	11,711	5	22.1	11,692	19	5	.....	22.1	.....	.....	.....	1	.....	.....	.....	...	...	...	...	2	...	...	...
	Webster	5,696	2	18.3	5,652	44	2	.....	18.3	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Westfield	7,587	4	27.1	7,525	62	4	.....	27.2	.....	.....	.....	2	.....	.....	.....	...	...	...	...	2	...	1	...
	Brookline	8,053	3	19.4	8,036	17	3	.....	19.4	.....	.....	.....	1	.....	.....	.....	...	...	...	...	1	...	...	...
R. I	Providence	104,855	37	18.4	101,209	3,646	34	3	17.6	41.2	.....	.....	8	1	....	.....	1	...	...	...	10	1	2	...
Conn	New Haven	62,882	27	22.4	60,654	2,228	26	1	23.0	23.0	.....	.....	4	1	.....	.....	...	...	...	...	3	...	...	...
	New Britain	13,978	4	14.9	13,903	75	4	.....	15.0	.....	.....	.....	1	.....	.....	.....	...	...	...	...	1	...	...	...
	Waterbury	20,269	5	12.9	20,117	172	5	.....	13.0	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	2	...	...	...
	Fairfield	3,748	1	13.9	3,603	145	1	.....	14.4	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Norwich	21,141	5	12.3	20,579	562	5	.....	12.7	.....	.....	.....	1	.....	.....	.....	...	...	...	...	2	...	...	...
N. Y	New York	1,206,577	814	35.2	1,186,144	20,433	801	13	35.2	33.2	.....	.....	293	.....	.....	.....	21	...	19	...	130	...	29	...
	Brooklyn	566,689	278	25.6	586,474	8,215	273	5	25.5	31.8	.....	.....	106	.....	.....	.....	9	...	1	...	44	...	10	...
	Yonkers	18,892	4	11.1	18,528	364	4	.....	11.3	.....	.....	.....	2	.....	.....	.....	...	...	1	...	1	...	1	...
	Poughkeepsie	20,207	10	25.8	19,513	694	10	.....	27.4	.....	.....	.....	2	.....	.....	.....	1	...	...	...	2	...	...	...
	Utica	33,913	6	9.2	33,669	244	6	.....	9.3	.....	.....	.....	1	.....	.....	.....	...	...	...	...	1	...	...	...
	Rochester	89,363	27	15.8	88,845	518	27	.....	15.9	.....	.....	.....	8	.....	.....	.....	1	...	2	...	4	...	...	...
	Watertown	10,697	6	29.3	10,589	108	6	.....	29.8	.....	.....	.....	1	.....	.....	.....	1	...	...	...	...	...	...	...
	Binghamton	17,315	5	15.0	16,921	394	5	.....	15.1	.....	.....	.....	1	.....	.....	.....	...	...	...	...	1	...	...	...
	Cambridge	1,850	.....	.....	1,800	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Seneca Falls	5,880	4	34.8	5,839	41	4	.....	35.0	.....	.....	.....	1	.....	.....	.....	...	...	2	...	1	...	...	...
	Tarrytown	3,276	3	47.7	2,959	66	3	.....	47.8	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Little Falls	6,910	2	14.7	6,836	74	2	.....	14.8	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	1	...	...	...
N. J	Hudson Co	187,950	96	26.6	186,254	1,696	.....	.....	.....	.....	.....	.....	36	.....	.....	.....	3	...	1	...	12	...	3	...
	Newark	136,400	75	28.7	133,074	3,326	74	1	29.2	14.8	.....	.....	31	.....	.....	.....	1	...	1	..	10	...	1	...
	Orange	13,206	6	23.7	12,749	457	6	.....	24.6	.....	.....	.....	2	.....	.....	.....	...	...	...	...	1	...	...	...
	Camden	41,658	18	22.5	38,064	3,594	14	4	19.2	57.6	.....	.....	6	.....	.....	.....	...	...	...	...	4	...	...	...
	Plainfield	8,126	1	6.5	7,633	493	1	.....	6.8	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Asbury Park	1,640	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
Pa	Philadelphia	846,980	397	24.5	815,182	31,798	374	23	23.9	37.7	.....	.....	149	.....	.....	.....	4	...	4	...	55	7	3	...
	Pittsburgh	156,381	88	23.4	152,290	4,091	85	3	29.1	39.1	....	.....	35	2	.....	.....	9	1	10	...	9	1	1	...
	Erie	27,730	10	18.8	27,499	231	10	.....	18.9	.....	.....	.....	3	.....	.....	.....	...	...	2	...	3	...	1	...
	Reading	43,280	14	16.9	42,926	354	13	1	15.9	147.3	.....	.....	8	.....	.....	.....	...	...	...	...	...	...	1	...
D. C	Dist. of Col	180,000	96	27.7	120,000	60,000	52	44	22.6	38.1	.....	.....	16	17	.....	.....	2	...	...	1	4	16	3	...
Va	Norfolk	21,966	17	40.4	11,933	10,033	4	13	17.7	66.8	.....	.....	1	4	.....	.....	...	...	1	...	2	...	...	...
	Lynchburg	15,959	6	19.6	7,484	8,475	2	4	13.9	25.3	.....	.....	.....	4	.....	.....	...	...	...	...	...	...	...	...
	Richmond	63,803	49	40.1	35,756	28,047	25	24	36.5	45.1	.....	.....	5	8	.....	.....	...	...	...	...	5	8	...	...
W. Va	Wheeling	31,266	8	13.0	30,551	715	7	1	13.9	72.9	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
S. C	Charleston	49,999	33	34.4	22,713	27,286	12	21	28.0	39.9	.....	.....	7	7	.....	.....	...	...	...	...	...	2	...	...
Ga	Augusta	23,023	12	27.2	12,504	10,659	6	6	25.3	29.7	.....	.....	.....	1	.....	.....	...	...	...	...	2	...	...	...
	Atlanta	37,421	14	19.3	21,086	16,335	7	7	17.1	22.3	.....	.....	2	3	.....	.....	...	...	...	...	2	2	...	...
	Savannah	30,681	18	30.6	15,007	15,674	10	8	34.8	25.7	.....	.....	4	2	.....	.....	2	1	...	...	1	2	...	...
	Rome	3,877	3	11.6	2,154	1,723	1	2	24.5	60.4	.....	.....	1	.....	.....	.....	...	...	...	...	...	...	...	...
	Brunswick	2,891	2	36.0	1,445	1,446	.....	2	.....	73.8	.....	.....	.....	.....	.....	.....	...	...	...	...	...	2	...	...
Fla	Jacksonville	5,563	9	84.3	3,095	2,468	5	4	86.0	84.6	.....	.....	1	2	.....	.....	...	...	...	...	1	...	...	...
	Key West	9,890	9	47.5	6,746	3,144	3	6	23.2	99.0	.....	.....	2	3	.....	.....	...	...	...	...	...	2	...	...
Ala	Mobile	31,205	21	35.1	16,837	14,368	8	13	24.7	47.2	.....	.....	1	3	.....	.....	...	...	...	...	2	2	...	...
	Selma	7,529	1	7.0	3,345	4,184	.....	1	.....	12.8	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
Miss	Columbus	5,519	.....	.....	1,933	3,586	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Natchez	7,058	.....	.....	3,421	3,637	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	...	...	...	...	...	...	...
	Vicksburg	11,814	6	26.5	5,975	5,839	2	4	17.9	36.0	.....	.....	1	.....	.....	.....	...	...	1	...	...	...	...	...
La	New Orleans	216,140	136	32.7	158,379	57,761	89	47	29.3	42.1	.....	.....	38	15	.....	.....	3	...	...	...	8	12	2	...
	Shreveport	11,017	3	14.2	3,739	7,276	2	1	27.8	7.2	.....	.....	.....	1	.....	.....	...	...	...	...	1	...	...	...
	Baton Rouge	7,217	4	29.0	2,917	4,300	1	3	17.9	37.0	.....	.....	.....	2	.....	.....	...	1	...	...	1	...	...	...
Tex	San Antonio	20,561	4	10.3	17,525	3,036	3	1	9.0	12.3	.....	.....	3	1	.....	.....	1	...	...	...	...	...	...	...
	Austin	10,960	6	28.6	7,349	3,611	2	4	14.2	58.4	.....	.....	2	1	.....	.....	...	...	1	...	...	3	...	...

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 30, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Tex	Waco	7,296	2	14.2	4,716	2,580	1	1	11.1	20.2			1					1						
	Galveston	22,253	15	35.2	16,900	5,353	11	4	33.3	39.4			3	1					2		2			
Ark	Little Rock	13,185	6	23.7	8,646	4,549	5	1	30.5	11.4			1						1					
Tenn	Nashville	43,461	22	26.4	27,004	16,457	11	11	21.3	35.3			3	2							3	4		
	Memphis	33,593	27	41.9	18,622	14,971	8	19	22.3	66.1			3	9				2			1			
	Clarksville	3,860			2,134	1,726																		
	Murfreesboro'	3,800			1,777	2,023																		
	Trenton	1,383	1	37.2	828	555	1		93.8															
Ky	Louisville	123,763	43	17.7	102,842	20,920	37	6	18.8	14.9			8	2			5		1		5	2	1	
	Bowling Green	5,111	2	20.4	3,254	1,857	1	1	16.0	28.0														
Ohio	Cincinnati	255,708	122	24.9	247,538	8,170	105	17	22.1	115.3			39				5		2		25	5		
	Cleveland	160,140	56	18.3	158,094	2,048															11		1	
	Dayton	38,677	13	17.4	37,684	989	13		17.8				5				1				2			
	Gallipolis	4,400	2	23.6	3,474	926	1	1	14.8	56.3														
	Portsmouth	11,314	5	23.1	10,346	968	5		26.1				3								1			
Ind	Indianapolis	75,074	35	24.3	68,558	6,516	33	2	25.3	16.0			8						2		5	1	1	
	Evansville	29,280	14	34.9	26,563	2,717	11	3	21.4	57.6			7				1		2		2	1		
	Richmond	12,743	4	16.4	12,106	637	3	1	13.0	81.9											1	1		
Ill	Chicago	503,304	321	33.2	496,020	6,684	321		33.7				165				11		11		35		4	
	Peoria	29,315	8	14.2	28,821	494	8		14.5				2				1		2					
	Aurora	11,825	1	4.4	11,612	213	1		4.4															
	Jacksonville	10,927	2	9.6	10,222	705	2		10.3												1			
	Elgin	8,789	3	17.9	8,647	142	3		18.0															
	Moline	7,805	4	26.7	7,673	132	4		27.2												1			
	Rock Island	11,660	10	43.7	11,473	187	10		44.1				6						4					
	Lake	18,396	4	11.3	18,385	11	4		11.3				3											
Wis	Milwaukee	115,578	65	29.1	115,275	303	65		29.4				38				3		7		5		3	
Minn	Saint Paul	41,498	15	18.9	41,000	498	15		19.0								1		1		4		1	
Mich	East Saginaw	19,016	4	11.0	18,832	184	4		11.1				1								1		1	
	Flint	8,410	2	12.4	8,163	247	2		12.8												1			
	Lansing	8,319	5	31.7	8,109	210	5		32.1				2											
Iowa	Keokuk	12,117	9	38.7	11,066	1,051	8	1	37.7	49.1			1								4			
Nebr	Omaha	30,518	8	13.7	29,680	838	8		14.1				1						2		2			
Kans	Lawrence	8,511	1	6.1	6,515	1,996		1	8.0															
Colo	Boulder	3,669	3	51.0	3,624	45	3		51.2				3											
Utah	Salt Lake City	20,768	10	25.1	20,591	177	10		25.3				3								1			
Cal	San Francisco	233,956	79	17.6	210,515	23,441	70	9	17.3	20.3			23				1				10	2	1	
	Vallego	6,587	1	7.9	6,303	284	1		8.4															
	Los Angeles	11,311	4	18.5	10,498	813	4		19.9				2						1		1			
	Total	7,627,382	3,828	26.0									1,242	93			107	6	92	2	539	77	80	

ABSTRACTS FROM CONSULAR REPORTS.

ASPINWALL.—United States Consul J. Thorington states, under date of April 22, that the report of small-pox at that port is incorrect, and no contagious disease is known to exist. In October there was one case of small-pox, but no other cases occurred and the health of the town has continued good.

BASLE, SWITZERLAND.—United States Consul F. H. Mason, in his report of mortality for the four weeks ending April 19, observes that "the usual epidemic of typhus prevails, there being at times about 160 cases at one time in the city during the month. A curious feature of the disease this year is, that it is most prevalent in the newest and wealthiest portion of the city where the houses are provided with underground drainage and all modern luxuries."

In the table the following causes of death are noted: Consumption 22, other lung diseases 14, croup 6, typhus fever 23, scarlet fever 1, whooping-cough 1. Annual death-rate about 31 per 1,000.

BEIRUT.—Under date of March 26 United States Consul J. T. Edgar reports that the plague has broken out in the southeastern part of Asiatic Turkey, in the province of Irak Arabi, south of Bagdad. Strict quarantine measures have been established by the Turkish officials to isolate the disease as far as possible. Numerous quarantine stations have been established by the governors of Aleppo and Damascus in the direction of Bagdad.

CONSTANTINOPLE.—Under date of April 10, the following communication is sent by Aristarchi Bey, minister to the United States from Turkey:

Several of the Constantinople newspapers, on pretended private information, have published alarming reports regarding the plague in Mesopotamia. It is true that the epidemic has made great havoc in proportion to the population of the infected district, but it has not extended beyond the *cordon* organized to restrict it. The quarantine measures enforced in other and remote parts of the country have been only to afford protection to Syria, and to avoid damage to commerce on the Red Sea and the Mediterranean. The loss from such damage was very great during the time of the plague at Astrakan. It is to be hoped that such injury to commerce will not be wrought by exaggerated publications and unfounded reports.

CONSTANTINOPLE.—United States Consul G. H. Heap, under date of April 12, calls the attention of the Government of the United States to the continued prevalence and extension of the plague, in the region about the lower Euphrates. This disease is spreading, in spite of the vigorous measures adopted to confine it, because the nomadic tribes, among whom it appears, immediately disperse in a panic, and no military *cordon*, however strict, can prevent them from escaping through the lines. The point of interest to the United States is the danger of infected articles being received from the districts mentioned in former dispatches. Shawls, rugs, and carpets coming from that region are usually packed in close bales, and not opened till they reach their port of destination in Europe or America. Such articles are frequently those which have been in use by families in which a death from contagious disease has occurred, and induced a sale of effects regarded as dangerous. Italy, Russia and Egypt have taken measures to guard against infection from this source. The telegrams indicate continued vigilance on the part of the sanitary authorities and their agents under the Turkish Government.

FOOCHOW, CHINA.—United States Consul J. C. A. Wingate reports that up to March 5 no epidemic or contagious disease was known to exist in the city.

GUADALOUPE, WEST INDIES.—United States Consul Charles Bartlett forwards a report for the first three months of 1881. There were 41 cases of yellow fever treated during this time at the military hospital, of which 22 proved fatal; in the town of Pointe à Pitre there were 10 cases and 4 deaths. The hospital cases were all from the shipping. Of the cases in the town, three only were citizens, six were masters of vessels in port, and one was an officer who contracted the disease in Martinque. It is observed that the masters of vessels, who spend most of their time on shore while in port, are less liable to contract the fever than the sailors, who are more confined to the shipping and its vicinity.

GUAYMAS, MEXICO.—United States Consul A. Willard reports for the month of March a total of 10 deaths, in a population of 5,500; annual death-rate, 21.8 per 1,000. No contagious diseases are reported.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING APRIL 30, 1881—Continued.

Diarrhœal diseases. W.	Diarrhœal diseases. C.	Diphtheria. W.	Diphtheria. C.	Erysipelas. W.	Erysipelas. C.	Fever. Typhoid. W.	Typhoid. C.	Malarial. W.	Malarial. C.	Scarlet. W.	Scarlet. C.	Acute lung diseases. Pneumonia. W.	Pneumonia. C.	Congestion of lungs. W.	Congestion of lungs. C.	Bronchitis, acute. W.	Bronchitis, acute. C.	Pleurisy. W.	Pleurisy. C.	Measles. W.	Measles. C.	Puerperal diseases. W.	Puerperal diseases. C.	Small-pox. W.	Small-pox. C.	Whooping-cough. W.	Whooping-cough. C.	Other diseases. W.	Other diseases. C.	Cities.	States
														1																Waco	Tex.
										1			2									1	1					5	1	Galveston	
1										1		1				1												1		Little Rock	Ark.
												2	2	1						1							1	5	4	Nashville	Tenn.
	1												4				1				1		1					7	9	Memphis	
																														Clarksville	
																														Murfreesboro'	
												1																		Trenton	
						3	2			1		2	1			1												18	1	Louisville	Ky.
													1															1		Bowling Green	
1		2		3		1				1		5	1	2						12								46	11	Cincinnati	Ohio.
3		1		1		1				1				1						12						1		33		Cleveland	
						1						1																6		Dayton	
																												1	1	Gallipolis	
						1																				1		2		Portsmouth	
2		1		2				2						1				1				2						14	1	Indianapolis	Ind.
1						2							1							1							1	2		Evansville	
												1																1		Richmond	
31		12		1		3		1		9		30		2		19				5		4		8		4		131		Chicago	Ill.
								1		1																		3		Peoria	
																												1		Aurora	
																												1		Jacksonville	
		1								1		1																		Elgin	
																												3		Moline	
										1						2												3		Rock Island	
																												4		Lake	
		3		1				1		3		5								1								33		Milwaukee	Wis.
						1																						7		Saint Paul	Minn.
		1																										1		East Saginaw	Mich.
												1																		Flint	
																												5		Lansing	
												1	1							1								1		Keokuk	Iowa.
						1				1																		2		Omaha	Nebr.
																													1	Lawrence	Kans.
										2																		1		Boulder	Colo.
		1										1		1														6		Salt Lake City	Utah.
		1				3				2		7				2						1						42	5	San Francisco	Cal.
																												1		Vallejo	
																												2		Los Angeles	
80	12	139	6	21		57	5	33	4	141	6	308	41	30	1	103	7	3	1	46	1	45	2	75	8	18	2	1,576	156		

PORTO RICO, WEST INDIES.—United States Commercial Agent Edward E. White, under date of April 21, states that small-pox has prevailed in the town of Ponce since August of last year. From August 6, 1880, to April 12, 1881, there have been 532 deaths reported officially. In August, only 10, but increasing to a maximum of 94 in December, and falling to 64 in March. During the first 12 days of April there were 14 deaths, indicating a decline in the epidemic. The deaths reported were among a population estimated at 15,000, and therefore show an extensive prevalence of the disease; the number of cases could not be ascertained. As illustrating the value of vaccination, it is noted that among the Spanish soldiers, who are compelled to use that means of prevention, no death is reported, and no case is known to have occurred.

SHANGHAI, CHINA.—Reports to March 22 state that the general health of this city continues good; only one case of typhoid fever is noted in the report, and two cases of small-pox among sailors had lately occurred.

SINGAPORE.—United States Consul A. G. Studer reports his district free from epidemic diseases up to March 28, and forwards a report of mortality for the month of February. The following causes of death are noted: From consumption 42, other lung diseases 17, diarrhœal diseases 30, "fever" 48, small-pox 1, leprosy 17.

VALPARAISO, CHILI.—United States Consul L. H. Foote, in his report for the month of February, gives a total of 454 deaths, in a population of 101,088. This would give an annual death-rate of 59.0 per 1,000; but 63 deaths being due to wounds received in the war, this number should be deducted and the rate reduced to 49.3. Consumption caused 40 deaths, fevers 164, acute lung diseases 53, and small-pox 8.

The following reports, for the week ending April 30, 1881, are from places where burial permits are not required:

Allegheny, Pa., 79,000; deaths, 20; under 5 years, 11; accident 1, cerebro-spinal meningitis 3, diarrhœa 1, diphtheria 2, bronchitis 1, small-pox 1, whooping-cough 1. Bath, Me., 8,000; deaths, 5; consumption 1. Belfast, Me., 5,308; deaths, 1. Brattleborough, Vt., 6,000; deaths, 2; under 5 years, 2; croup 1. Bucyrus, Ohio, 3,950; deaths, 4; under 5 years, 2; cerebro-spinal meningitis 1, whooping cough 2. Calais, Me., 6,172; deaths, 1. Carrollton, Miss., 600; deaths, 1; bronchitis 1. Chillicothe, Ohio, 11,000; deaths, 2; under 5 years, 1; cerebro-spinal meningitis 1. Circleville, Ohio, 5,996; deaths, 7; cerebro-spinal fever 5, pneumonia 1. Coldwater, Mich., 4,800; deaths, 4; consumption 1, pneumonia 2. Columbus, Ga., 10,000; deaths, 4; under 5 years, 2; accident 1, consumption 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,327; deaths, 5; under 5 years, 2; diarrhœa 1, pneumonia 2, accident 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Greenville, S. C., 6,500; deaths, 1. Hernando, Miss., 1,000; deaths, 11; under 5 years, 1; diarrhœa 1, malarial fever 1, pneumonia 2, congestion of lungs 1, bronchitis 1, pleurisy 1, measles 3. Huntingdon, Pa., 4,500; deaths, 6; under 5 years, 2; consumption 1. Huntingdon, Tenn., 1,200; deaths, 1; pneumonia, 1. Indianola, Tex., 900; deaths, 1. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,250; deaths, 1; under 5 years, 1. Kenosha, Wis., 5,500; deaths, 1; consumption 1. La Salle, Ill., 8,885; deaths, 5; under 5 years, 1; consumption 1, diphtheria 1. Louisiana, Mo., 5,000; no deaths. Madison, Ind., 8,945; deaths, 7; under 5 years, 3, consumption 1, malarial fever 1. Martinsburg, W. Va., 6,334; deaths, 1. Meridian, Miss., 4,013; deaths, 2. Milan, Tenn., 1,800; no deaths. Milledgeville, Ga., 3,000; deaths, 1; puerperal 1. Muskegon, Mich., 11,300; deaths, 3; under 5 years, 1; pneumonia 1, puerperal 2. Niles, Mich., 4,200; deaths, 1. Ocala, Fla., 1,000; deaths, 1; measles 1. Painesville, Ohio, 5,504; deaths, 2; consumption 1, pleurisy 1. Pass Christian, Miss., 2,000; no deaths. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; no deaths. Rensselaer, Ind., 900; no deaths. Senatobia, Miss., 935; deaths, 1; under 5 years, 1; pneumonia 1. Springfield, Ohio, 21,000; deaths, 9; croup 1, pneumonia 1, measles 1. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; deaths, 1; under 5 years, 1; accident 1. Tuscaloosa, Ala., 2,000; deaths, 1. Verona, Miss., 1,000; no deaths. Winchester, Va., 5,000; deaths, 4; under 5 years, 3; scarlet fever 2, bronchitis 2. Youngstown, Ohio, 15,421; deaths, 2; accident 3, cerebro-spinal meningitis 1, consumption 2. Total population, 302,318; deaths under 5 years, 35; total number of deaths, 117; annual rate per 1,000, 20.1.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	Apr. 23	2	23.2													53
Canada	Kingston	15,000	Apr. 30	3	10.4													50
Bermuda	Hamilton	14,867	May 3	2	7.0							6						62
Cuba	Havana	195,437	Apr. 23	192	51.2				3		39				18			78
Hayti	Aux Cayes	9,000	Apr. 9	5	29.0													76
Do	do	9,000	Apr. 16	6	34.8													80
Do	Port-au-Prince	30,000	Apr. 13	14	24.3													85
Do	do	30,000	Apr. 20	29	50.5													86
Do	Gonaives	6,000	Feb. 26	1	8.7													87
Do	do	6,000	Mar. 5	1	8.7													72
Do	do	6,000	Mar. 12	4	34.7													73
Do	do	6,000	Mar. 19	4	34.7													73
Do	do	6,000	Mar. 26	4	34.7													75
West Indies	Curacao	12,025	Apr. 4	1	4.35													
Do	do	12,025	Apr. 11	5	21.7													
Do	do	12,025	Apr. 18															
Mexico	Acapulco	3,500	Apr. 3	17	253.5					20	7							86
Do	do	3,500	Apr. 10	13	193.8					17	4							87
Do	do	3,500	Apr. 17	12	178.8					10	3							85
Do	Matamoras	16,000	Apr. 23	8	26.1												8	
Do	do	16,000	Apr. 30	8	26.1													
Do	Vera Cruz	20,000	Apr. 17	16	41.7				3		3							76
U. S. of Columbia	Aspinwall	3,000	Apr. 23	6	104.3													86
Teneriffe	Santa Cruz	16,610	Apr. 2	4	12.5					1	1	1						69
Do	do	16,610	Apr. 9	9	28.2							1						70
Grand Canary	Las Palmas	18,000	Mar. 19	13	37.5							2	2					
Do	do	18,000	Mar. 26	13	37.5							1	1					
Do	do	18,000	Apr. 2	11	31.8							1	1					
Ireland	Queenstown	10,000	Apr. 23	3	15.6													
Do	Belfast	230,000	Apr. 16	107	24.3								1				1	
Do	do	230,000	Apr. 23	100	22.7								1				3	
Scotland	Dundee	155,100	Apr. 16	69	23.0												1	43
Do	Leith	59,958	Apr. 23	14	12.2								1				3	42
England	London	3,707,130	Apr. 16	1,636	23.0						77		19				140	51
Do	Liverpool	549,834	Apr. 23	288	27.3					1	1	2	4	28	1	22	14	44
Do	Sheffield	304,938	Apr. 23	129	22.0													43
Do	Bradford	197,196	Apr. 9	77	20.4												5	
Do	do	197,196	Apr. 16	88	20.3								1				5	
Do	Tunstall	27,775	Apr. 23	10	18.4													45
Do	Cardiff	83,389	Apr. 23	29	18.0													47
France	Rouen	104,209	Apr. 23	64	31.8													
Switzerland	Geneva	50,233	Apr. 16	12	12.5													54
Do	Zurich	25,329	Apr. 16	17	35.1													
Holland	Amsterdam	316,952	Apr. 16	179	29.6								1		1		4	52
Do	Rotterdam	152,515	Apr. 23	86	29.2											21		
Germany	Berlin	1,123,571	Apr. 9	536	24.8	5	3					10	5	3		128	65	36
Do	Barmen	95,000	Apr. 16	45	25.2												1	36
Do	Bremen	112,000	Apr. 9	60	27.9												3	
Do	Breslau	273,000	Apr. 9	184	34.7												20	34
Do	Brunswick	75,000	Apr. 16	57	39.5								2				5	42
Do	Cologne	144,750	Apr. 16	105	28.0								2				9	
Do	Frankfort	137,000	Apr. 9	53	20.5												1	49
Do	Mannheim	50,500	Apr. 16	15	14.8													53
Do	do	50,500	Apr. 23	28	27.7													49
Bavaria	Munich	220,000	Apr. 16	144	32.6						2						18	
Do	Nuremberg	99,520	Mar. 19	63	33.0								1				11	39
Do	do	99,520	Mar. 26	61	31.9								1				8	38
Do	do	99,520	Apr. 2	59	30.9												4	41
Belgium	Antwerp	173,643	Apr. 9	90	27.0					11	3	13	5				3	
Do	do	173,643	Apr. 16	89	26.7					16	1	13	3				1	
Saxony	Dresden	224,216	Apr. 9	101	24.2												13	36
Do	Chemnitz	95,135	Apr. 9	54	29.6											4	4	34
Do	Leipsic	151,616	Apr. 16	54	18.5													46
Denmark	Copenhagen	235,254	Apr. 12	123	25.8					3		9					14	36
Italy	Genoa	185,000	Apr. 23	69	18.2													57
Austria	Vienna	731,191	Apr. 16	454	28.2						21		3				18	46
Do	Trieste	128,295	Mar. 19	85	34.0								1				4	
Do	do	128,295	Mar. 26	94	37.6								1				2	
Roumania	Bucharest	177,646	Apr. 18	98	27.8						2		3				5	
Russia	Warsaw	379,763	Apr. 9	178	24.4													32
Sweden	Stockholm	173,433	Apr. 9	109	32.7								2				7	31
Norway	Christiania	120,000	Apr. 9	43	18.7							4				17	5	28
Spain	Seville	138,000	Apr. 17	60	22.6										2		16	53
Do	Malaga	115,882	Apr. 10	85	38.2						4						3	70
Barbary	Tripoli	20,000	Apr. 9	5	13.0													76
Egypt	Alexandria	220,000	Apr. 9	166	39.3													
Do	do	220,000	Apr. 16	127	30.1													
Morocco	Tangier	15,000	Mar. 26	5	17.3					1								
Do	do	15,000	Apr. 2	4	13.8													68
Do	do	15,000	Apr. 9	11	38.0													65
Cape Colony	Cape Town	35,000	Apr. 4	25	37.2													76
East Indies	Calcutta	429,535	Mar. 26	287	34.8						10		13				8	75

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy Notice of at least one week should be given when a large number is required.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, MAY 21, 1881. [No. 47.

MONTHLY REVIEW FOR APRIL, 1881.

The mean population represented in the reports for the four weeks ending April 30 is 50,113 less than that for the month of March. The general mortality is slowly increasing and has advanced from 23.32 to 24.88 per 1,000 per annum. The death-rate of children under 5 years has increased in nearly the same ratio, from 8.13 to 8.64 per 1,000. The monthly reviews so far have not included the record of *cerebro-spinal meningitis*, though this disease has been comprised in the weekly reports since January 1 of this year, in the new form of tables adopted at that time. The deaths from this cause for the first week in January were only 24, but the increasing mortality and the wide distribution of the disease have attracted attention, and its movement will be noted in future. For the present it can only be stated that from the rank of whooping-cough, one of the least fatal of our zymotics, cerebro-spinal meningitis has advanced to a position between scarlet fever and diphtheria, which are the leading causes of death among the contagious or infectious zymotic diseases in this country. The reports for the month of April do not indicate any regular increase in mortality from this disease, only the usual fluctuations being observed.

TABLE OF PRINCIPAL CAUSES OF DEATH.

Week ending—	Population.	Total deaths.	Annual rate per 1,000.	Deaths under 5 years.	Annual rate per 1,000.	Per cent. of deaths.	Cerebro-spinal meningitis.			Consumption and lung diseases.			Consumption.		
							Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
April 9, 1881	8,067,727	3,720	24.11	1,278	8.26	34.27	84	0.54	2.25	1,108	7.16	29.71	588	3.80	15.77
April 16, 1881	8,048,212	3,741	24.24	1,282	8.31	34.27	98	0.64	2.62	1,125	7.29	30.08	565	3.66	15.10
April 23, 1881	7,931,183	3,806	25.04	1,339	8.81	35.18	99	0.65	2.60	1,106	7.27	29.06	563	3.70	14.78
April 30, 1881	7,627,373	3,828	26.18	1,345	9.20	35.14	94	0.64	2.45	1,106	7.56	28.88	616	4.21	16.08
Totals	31,674,495	15,104	.....	5,244	.....	.....	375	.....	.....	4,445	.....	.....	2,332	.....	.....
Means	7,918,624	3,776	24.88	1,311	8.64	34.72	93¾	0.62	2.48	1,111¼	7.32	29.43	583	3.84	15.43

Week ending—	Lung diseases, acute.			Diphtheria and croup.			Diphtheria.			Croup.			Scarlet fever.		
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
April 9, 1881	520	3.36	13.94	203	1.31	5.45	126	0.81	3.38	77	0.50	2.07	146	0.96	3.91
April 16, 1881	560	3.63	14.98	195	1.25	5.20	125	0.80	3.33	70	0.45	1.87	119	0.77	3.18
April 23, 1881	543	3.57	14.28	218	1.43	5.72	146	0.96	3.83	72	0.47	1.89	146	0.96	3.83
April 30, 1881	490	3.35	12.80	225	1.54	5.89	145	0.99	3.80	80	0.55	2.09	147	1.00	3.84
Totals	2,113	.....	.....	841	.....	.....	542	.....	.....	299	.....	.....	558	.....	.....
Means	528¼	3.48	14.00	210¼	1.38	5.56	135½	0.89	3.59	74¾	0.49	1.97	139½	0.92	3.70

Week ending—	Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
April 9, 1881	51	0.33	1.37	72	0.46	1.93	37	0.24	0.99	16	0.10	0.43	32	0.20	0.85	61
April 16, 1881	58	0.38	1.55	56	0.36	1.50	45	0.29	1.20	14	0.09	0.38	56	0.36	1.50	73
April 23, 1881	48	0.32	1.26	74	0.49	1.94	49	0.32	1.29	28	0.18	0.74	53	0.35	1.39	70
April 30, 1881	92	0.63	2.40	62	0.42	1.62	47	0.32	1.23	20	0.14	0.52	37	0.25	0.97	83
Totals	249	.....	.....	264	.....	.....	178	.....	.....	78	.....	.....	178	.....	.....	287
Means	62¼	0.41	1.65	66	0.43	1.75	44½	0.29	1.18	19½	0.14	0.52	44½	0.29	1.18	71¾

Causes of death.—The changeable weather of April has naturally augmented the mortality from consumption and acute lung diseases, which has risen 38 per cent. since March. The increase is, however, remarkably unequal, being 33 per cent. for phthisis and only 5 per cent. for the acute diseases of the lungs. A slight increase is observed in all the zymotics, excepting diphtheria and malarial fevers. Small-pox in Philadelphia has fallen from 215 to 148 deaths, and is no longer reported from the Mexican border; the States in communication with Canada and with European ports now seem to be chiefly infected.

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES.

Sections.	Mean population.	Total deaths.	Annual rate per 1,000.	Cerebro-spinal meningitis.			Consumption and lung diseases.			Consumption.			Lung diseases, acute.			Diphtheria and croup.			Diphtheria.		
				Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.
Northeast	4,863,255	9,558	25.64	160	0.43	1.67	2,921	7.84	30.56	1,484	3.98	15.53	1,437	3.86	15.03	661	1.77	6.91	426	1.14	4.46
Southeast	1,085,188	2,285	27.46	29	0.35	1.27	645	7.75	28.23	385	4.63	16.85	260	3.12	11.38	46	0.55	2.01	32	0.38	1.40
Northwest	1,709,504	2,920	22.30	185	1.41	6.33	794	6.06	27.19	416	3.17	14.25	378	2.89	12.84	124	0.95	4.25	77	0.59	2.64

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	235	0.63	2.46	389	1.04	4.07	108	0.29	1.13	179	0.48	1.87	77	0.21	0.80	50	0.13	0.52	89	0.24	0.92	120
Southeast	14	0.17	0.61	104	1.28	4.55	71	0.85	3.10	31	0.37	1.35	38	0.45	1.66	7	0.08	0.30	43	0.51	1.88	22
Northwest	47	0.36	1.61	63	0.48	2.16	69	0.53	2.36	40	0.30	1.37	63	0.48	2.16	21	0.16	0.71	45	0.34	1.54	32

Distribution of diseases.—In the northeast section consumption and acute lung diseases have but a small share in the general increase of mortality from those causes, and the most marked changes are observed in scarlet fever, which has risen from 0.88 to 1.04, or 18 per cent., and in enteric fever, which has increased from 0.32 to 0.48, or 50 per cent. since March.

Southeast section.—Here consumption has remained stationary, while a fall of 18 per cent. is noted in acute lung diseases. Scarlet fever has increased from a rate of 0.78 to 1.28, or 64 per cent., and measles show a still greater advance, though still causing only 0.45 deaths per 1,000. Malarial fevers and diarrhœal diseases are gradually increasing their death-rates, but the latter are not yet to be ascribed to heat, as the month has been remarkable for a general low temperature.

Northwest section.—This section shows nearly the same increase in deaths from pulmonary affections as the northeast, but while consumption has advanced 24 per cent. the acute lung diseases have remained the same as in March. Diphtheria, scarlet fever, and enteric fever give a diminished mortality, but measles, whooping-cough, and malarial fevers have somewhat increased their rates. The reduction in the aggregate of deaths from small-pox has been noted, but the disease is still widely spread, and the 287 deaths reported in April are divided as follows: New York city, 46; Newburg, N. Y., 1; Binghamton, N. Y., 1; Hudson County, N. J., 20; Camden, N. J., 2; Philadelphia, 148; Pittsburgh, Pa., 2; Wilmington, Del., 13; Richmond, Va., 6; New Orleans, 1; Louisville, Ky., 2; Cincinnati, 1; Chicago, 31; San Francisco, 13.

ABSTRACTS FROM CONSULAR REPORTS.

BORDEAUX, FRANCE.—United States Consul B. Gerrish reports for the month of March, 10 deaths from small-pox, 6 from typhoid fever, and 31 from other contagious diseases. Total deaths, 457; population, 215,140; annual death-rate 25.0 per 1,000.

BUENOS AYRES.—United States Consul E. L. Baker sends the following report for the year 1880:

The health of the city has been uniformly good during the year; no disease has been epidemic, and neither cholera nor yellow fever has appeared. Quarantine precautions have doubtless prevented the importation of the latter disease from Rio Janeiro during the hot months. During a portion of the year small-pox prevailed all over the city and caused 832 deaths in a population of about 270,000. The sanitary condition of the city is not satisfactory, owing to the want of proper drainage. A few years ago a vast system of sewerage was commenced and much money expended; but the fund being exhausted the work remains unfinished and there is none but surface drainage. But for all other conditions being highly favorable the filthy condition of the city would produce much sickness. Yellow fever was last epidemic in 1871, when more than 20,000 persons died of it in 4 months. The last visitation of cholera was in 1874, when it proved more fatal in the country than in the city.

The total number of deaths in 1880 was 7,073, or 26.1 per 1,000 of the population. Dr. E. R. Coni, of the Buenos Ayres Medical Association, has published tables showing that from 1869 to 1880 (both included) the population has increased from 177,787 to 270,708. The highest death-rate for any year noted was 106.3, for the year 1871, when yellow fever prevailed. In 1874, the year of cholera, the rate was 32.4. The mean for the five years ending December 31, 1880, has been about 25.6, and the death-rate for 1880 is the lowest noted in 12 years past. The rate was highest for the winter months (July, August, and September), being then 27.2 per 1,000; in the summer (January) the lowest rate, 26.1, was observed. Of the total deaths, 2,024, or 28.75 per cent., were under one year of age, and 3,577, or 50.6 per cent., were under 10 years. A great disproportion is observed as to sex, the deaths of males being 4,233 and of females 2,840; this disparity was chiefly among adults, being 2,240 males to 1,256 females; among children, 1,993 males to 1,584 females. Among the principal causes of death were, consumption 774; other lung diseases 462; infantile convulsions 247; meningitis 397; heart diseases 334; diphtheria 335; small-pox 832; typhoid fever 163; cancer 177. In 1875 there were 1,041 deaths from small-pox, but in 1878 the disease had nearly disappeared. Its return is ascribed to the arrival in the city of a number of Indians made prisoners on the frontier; small-pox soon broke out among them and thence spread through the city. The deaths from this disease were 83 in January, increased to 139 in May, and 112 in June, and then declined rapidly to 11 in January. The records for the past 10 years show 836 deaths from small-pox in 1872, only 76 the following year, then 525 for the next, and a maximum of 1,041 for 1875. In 1876 only 22 were reported, 12 the next year, and the least number, 7, in 1878. Then the outbreak of 1879 gave 429 deaths, and 832 occurred in 1880. Of these, 70 per cent. were under 10 years of age, and 78 per cent. were among the natives of the country, who do not form more than half of the population. The excess of deaths among natives as compared with foreigners is due to the prejudice against vaccination which exists among the former. Diphtheritic diseases caused 335 deaths in 1879, the mortality being about equally distributed among the twelve months. Typhoid fever was prevalent during 1880, and the increase and decrease of mortality from it corresponded closely with those from small-pox in time. The city of Buenos Ayres has been ceded to the Argentine Republic as its permanent capital, and its government is now under the direct control of the national Congress. It is probable, therefore, that in future more care will be taken to secure, record, and publish important statistics.

CHINESE CITIES.—The consuls at Amoy and Ningpo report those cities free from epidemic or contagious disease up to March 19. At Canton two cases of small-pox are noted March 7, and one death from typhus fever. March 14, one case of small-pox is reported.

CONSTANTINOPLE.—United States Consul G. H. Heap sends telegrams relating to the plague, up to April 18.

Dr. Zitterer gives a résumé of deaths reported for 28 days in March, showing that at least 460 deaths occurred at Nedjeff in that month, and complete returns give 791 deaths for the first 15 days of April.

Special dispatches from Dr. Zitterer report as follows:

April 8.—Plague still increasing at Nedjeff; 157 deaths in the 3 days ending April 6.

April 9.—No plague at Bagdad, but physicians kept there as reserves.

April 13.—Nedjeff evacuated; about 4,000 inhabitants put in camp on healthy ground, near Kaffé. Djaara and two neighboring villages burnt. Plague of the worst type, and often fatal in 10 hours. There were 309 deaths in the 5 days ending April 11, not including deaths outside of the town.

April 18.—The extension of the disease beyond the *cordons* has been admitted, but Dr. Zitterer states that a single suspicious case will give rise to a general panic, even before its nature is known. Dr. Bartoletti, of the sanitary commission, urges the greatest care in obtaining and reporting details of the pestilence, so that reliable accounts may be officially given.

CONSTANTINOPLE.—United States Consul G. H. Heap writes as follows regarding the plague in Mesopotamia, under date of April 27:

The sanitary administration of Constantinople states that the plague in Mesopotamia has not diminished in intensity, and the number of deaths has not become less; but it gives the assurance, notwithstanding reports to the contrary, that the pestilence is still confined to its original limits, and has not passed the military *cordons* drawn around the infected districts. The troops have lately been re-enforced. The administration still thinks that the means adopted to suppress the disease will prove successful.

The telegrams of Dr. Zitterer, dated April 19, report that at Chafieh, a village of 90 inhabitants, the plague appeared about the end of February, and by April 10 thirty of the people died. The remainder voluntarily evacuated the village. April 18 there were 69 deaths, and 71, April 19, at Nedjeff. Four cases had occurred among the soldiers. In consequence of the burial of bodies at Nedjeff, the people of Djaara bury the dead in four cemeteries between Djaara and Ramoul. That one nearest to Djaara contains already over 300 graves. April 18 there were 26 deaths reported.

GHENT, BELGIUM.—United States Consul A. Lefebvre reports for the month of March, 2 deaths from small-pox, 4 from typhoid fever, 2 from scarlet fever, and 6 from diphtheria. Total deaths, 355; population, 134,852; annual death-rate, 31.0 per 1,000.

Among other causes of death were: consumption, 56; other lung diseases 70, and 50 from diarrhœal diseases.

JAPAN.—United States Consul T. B. Van Buren reports from Kanagawa 169 deaths of natives, and one among foreigners, for the month of March. The only case in which the cause is given is one death from typhus fever.

MELBOURNE, AUSTRALIA.—United States Consul O. M. Spencer reports for the month of January 6 deaths from cholera, 13 from typhoid fever, and 11 from other contagious diseases. Total deaths 444, in a population of 270,264; annual death-rate 19.3 per 1,000.

NASSAU, BAHAMAS.—United States Consul T. J. McLain, jr., reports under date of April 16 that the sanitary condition of the town is excellent, and the health of the people continues good. No report of deaths is made.

NEW ZEALAND.—The reports for the month of February show that no epidemic or contagious disease prevails. For four of the principal towns 90 deaths are reported, and of these 28 were from diarrhœal diseases; the other zymotic diseases exist, but have caused only one death each from measles, scarlet fever, diphtheria, and whooping-cough. Consumption gives 8 deaths, being a little less than 9 per cent. of the total. In the United States the per cent. is usually about 14.

RIGA, RUSSIA.—United States Consul N. A. Bornhold reports for the month of February 395 births, and 307 deaths. Among the causes of death were, consumption 32, other lung diseases 23, small-pox 18, croup 16, scarlet fever 11, diphtheria 7, typhoid fever 7, puerperal fever 5, measles 5, whooping-cough 1, diarrhœa 2. Mean temperature 27°.

SANDWICH ISLANDS.—United States Consul D. A. McKinly reports for the month of March 177 deaths in Honolulu, of which 28 were under 5 years, and 13 over 70 years of age. During the same month of 1880 there were only 55 deaths. The increase is due to small-pox, which caused this year in March 123 deaths, leaving only 54 for other causes. Among these were, consumption 5, convulsions 2, dysentery 2, heart diseases 3, and puerperal 2.

SIERRA LEONE.—United States Consul J. A. Lewis forwards a report of the hospitals of this colony for the year 1880:

In these hospitals there were 650 patients admitted during the year, and 100 remained from 1879. Of these 750 there were discharged as cured, 361; as relieved, 132; as not relieved, 50, and 98 died. In the colonial hospital the least average space per patient in any ward was 1,212 cubic feet, and the greatest 2,979 feet. In Sherboro' Hospital 4,914 feet were allowed. The supply of pure water from mountain streams is unlimited, but the drainage and sewerage are defective.

In the Lunatic Asylum there were 18 patients admitted, the average number of inmates was about 38, and there were 11 deaths.

SYDNEY, AUSTRALIA.—The report for January shows the usual high rate of mortality among children, being 49 per cent. of all deaths in the city, and 68 per cent. in the suburbs. The births were 733, to 448 deaths.

In February, there were 628 births and 372 deaths. The infant mortality was 44.7 per cent. for the city, and 63.7 per cent. for the suburbs.

SANITARY LEGISLATION IN FLORIDA.

AN ORDINANCE THE BETTER TO SECURE AND PRESERVE THE PUBLIC HEALTH.

SECTION 1. The city council of the city of Pensacola do enact that the mayor shall at once issue his proclamation directing the establishment of quarantine to remain in force until removed by the board of health.

SEC. 2. The quarantine station shall be in Santa Rosa Sound, above Deer Point, and not less than one mile from the shore, and the quarantine hospital shall be at the Live Oak Plantation until otherwise directed.

SEC. 3. The board of health shall select a quarantine physician, who shall receive as compensation the amount that may be agreed upon between him and the board of health per month, in greenbacks. The quarantine physician shall charge the visiting fee in all cases where he attends patients, either on board ship or in quarantine hospital, and for all medicines and supplies furnished to the respective vessels, said fees to be collected from the masters of vessels to which such patients belong, and paid over to the city treasurer.

SEC. 4. The quarantine physician shall, as soon as quarantine is established, take his station at the quarantine hospital at Live Oak Plantation and remain within quarantine limits until the quarantine is removed, unless by special permit from the mayor.

The quarantine physician shall be at all times, between sunrise and sunset, ready to visit and board all vessels immediately on their arrival in the bay off Deer Point, at a point to be designated by a buoy, upon which shall be erected a flag-staff, showing a yellow flag. He shall show a yellow flag conspicuously in his boat to designate her character, and if any vessel shall, under any circumstances, pass by the quarantine boat or buoy, or refuse to obey the order of the captain of the guard or quarantine physician, the master or owner of any vessel so offending shall be held to answer in a fine not exceeding $500, and may be imprisoned until such fine with costs be paid.

SEC. 5. All vessels arriving after May 1, 1881, from Key West or any port in the West Indies, Central America, South America, or Mexico, or any other port where malignant or contagious diseases may be prevailing, or having on board any person ill with any disease of malignant or infectious character, shall be sent to the quarantine station and required to discharge their ballast or cargo, under the direction of the quarantine physician, and undergo such fumigation and cleansing as the quarantine physician may deem necessary, paying such fees or compensation therefor as the board of health shall prescribe.

The ballast shall be discharged in the ballast crib or as the quarantine physician may direct.

SEC. 6. The quarantine physician shall examine into the condition of every vessel going into quarantine and the health of the persons on board, and shall not permit any vessel, or person from any vessel, to approach the city until the requirements of the preceding section have been fulfilled; and further, until he is satisfied that the public health will not be endangered thereby; and further, until said permit is countersigned by the mayor and president of the board.

SEC. 7. All vessels entering the bay of Pensacola shall proceed directly to the quarantine, and no vessel shall anchor inside of the bar before she arrives at quarantine, except in cases of imperative necessity, in which case she shall at once make signal by hoisting her ensign with a wife (that is, tied around the middle), which will be a signal for a tug to come immediately. Any master or pilot violating this section shall be fined in a sum not exceeding three hundred dollars.

SEC. 8. It shall be the duty of pilots or other persons bringing vessels into the bay of Pensacola to hoist a flag at half-mast at the fore, and not to pass the quarantine buoy until the vessel has been visited by the quarantine physician; and it shall not be lawful for any person to visit or communicate with any vessel being taken into quarantine or in quarantine until said vessel has been visited by the quarantine physician and relieved from quarantine; and not then without a written permit from the quarantine physician, countersigned by the mayor and president of board of health.

Any person found guilty of violating the provision of this section shall be fined in a sum not exceeding three hundred dollars; and any master of a vessel permitting any such communication shall also be fined in a sum not exceeding three hundred dollars.

SEC. 9. No pilot or other person shall leave a vessel, after coming into Pensacola Bay, without a written permit to do so from the quarantine physician.

SEC. 10. All vessels at quarantine shall keep a flag at half-mast at the fore during the day, and a lantern in the same position at night.

It shall be the duty of the quarantine physician to cause any vessel having sickness on board to be anchored at least half a mile from other vessels which have no sickness on board, and it shall be his duty to prohibit any intercourse whatever between vessels in quarantine.

Should any such intercourse take place it shall be his duty promptly to report it to the mayor, and the master of every vessel so offending shall be fined in a sum not exceeding three hundred dollars.

SEC. 11. Any person visiting, or attempting to visit, the hospital

without permission from the quarantine physician shall be fined in a sum not less than three hundred dollars.

SEC. 12. Vessels at quarantine requiring fresh provisions shall communicate with the quarantine physician, who shall procure the same, if he deems it expedient, taking care that there is no intercourse between the ship, or boats belonging to the ship, and the parties furnishing the supplies.

SEC. 13. It shall be the duty of the quarantine physician to visit every vessel coming from any port and entering the bay of Pensacola. He shall require the captain of every vessel thus inspected to pay the sum of five dollars.

SEC. 14. Each and every vessel fumigated shall pay for such fumigation at the rate of twenty-five dollars for every vessel not exceeding 500 tons; forty dollars for vessels above 500 and not exceeding 750 tons, and fifty dollars for every vessel of 750 tons and upwards, and the cost of the disinfectants necessarily used; and for discharging ballast at the crib fifty cents per ton; which said fees, together with all other quarantine dues, shall be collected in currency or by order on consignee by the quarantine physician, and sent forthwith to the city treasurer to be set aside as quarantine fund, and paid out only on order of board of health.

SEC. 15. The quarantine physician shall make a weekly report to the board of health, showing the number and class of vessels visited by him, amount of fees collected, number of patients treated, and quantity of ballast discharged, and any other matter which may be of interest.

SEC. 16. That every pilot and pilot boat on the bay of Pensacola, and master of tug, shall be supplied with copies of this ordinance, and it shall be the duty of every pilot to furnish a copy of this ordinance to the master of every vessel which said pilot may speak or board, immediately upon said communication.

SEC. 17. Any violation of the quarantine shall be published in the manner prescribed by act regulating quarantine, passed by the legislature and approved March 11, 1879.

SEC. 18. All tugs (except when taking vessels into quarantine) and all crafts of every character going into or coming out of, or passing through quarantine lines, shall lay-to off, and as near the guard station as practicable, designated by a blue flag, and remain there until visited by the officer in charge of the guard and permitted by him to pass.

SEC. 19. That these rules and regulations shall continue in force until repealed, and all rules and regulations or ordinances in conflict or inconsistent with them are hereby repealed.

Adopted April 26, 1881.

ALOYSIUS RAUCH,
President City Council.

Approved April 27, 1881.

J. M. TARBLE, *Mayor.*

SANITARY INSPECTION IN THE MISSISSIPPI VALLEY.

The following resolutions have been passed by the Tennessee State Board of Health:

NASHVILLE, *April* 6, 1881.

Whereas it is believed that public confidence was preserved and a sense of security engendered throughout the Mississippi Valley by the operations of the inspection service of the National Board of Health during the summer of 1880; and

Whereas it is desirable that such well-grounded confidence and security be perpetuated in the interest of commercial and material progress, as well as in "the interest of health and life of the citizens of this State," with the general supervision and protection of which this board is charged by law; therefore, be it

Resolved, That the National Board of Health be, and it is hereby, invited to co-operate with and aid the State Board of Health of Tennessee in the execution and enforcement of its rules and regulations to prevent the introduction of contagious or infectious diseases.

Resolved, That in view of the increased facilities of communication with the Gulf and South Atlantic ports, the National Board is respectfully requested to advise, promptly, this board of health of threatened danger from that source at any time, together with such suggestions connected therewith as it may be proper to make.

Resolved, That this board formally approves and indorses the action of the board of health of the city of Memphis as set forth in the following resolutions adopted at a special meeting held on the 29th day of March 1881, as follows:

"*Resolved*, That the National Board of Health be respectfully requested to place on duty at New Orleans, and such other Southern ports as may be deemed necessary, an inspector or inspectors whose duty it shall be to supervise the shipment by river or rail of all goods, merchandise, baggage, &c., and to advise (by cipher telegram) the resident member of the National Board of Health in this city, or in the event of his absence, his official representative, whenever such shipments are believed to be infected, or in any wise dangerous to public health; and that the National Board instruct its resident member to promptly inform this board of the shipment of such infected or dangerous goods, &c., to this city.

"*Resolved*, That the quarantine grounds and buildings on President's Island be again tendered to the National Board of Health for use as an inspection station for the enforcement of the quarantine ordinance of the taxing district, which takes effect May 1, proximo, and for the general purposes of the inspection service of the National Board.

"*Resolved*, That copies of these resolutions and quarantine ordinance be transmitted to the secretary of the National Board of Health in Washington."

Resolved, That the secretary be, and is hereby, instructed to furnish a copy of above resolutions to the secretary of the National Board of Health, and the boards of health and sanitary council of the Mississippi Valley.

Attest:

W. M. CLARK, M. D.,
Secretary State Board of Tennessee.

In relation to the above resolutions, Dr. Clark makes the following observations:

At the meeting of April 5, without surrendering in any respect the rights or evading any duties, this board invited the co-operation of all other health organizations in effecting the protection of the public health. This invitation involves a reciprocal obligation on the part of this board, and I am authorized to express its desire for uniformity and concert of action with similar institutions. The "inspection service" of the National Board of Health presents a common basis to all, and from the indorsements it received last year from so many sources (see Supplement to Nat. B. of H. Bulletin, No. 12), we are warranted in requesting a continuance of the same. Should it at any time prove unsatisfactory, our organizations will be ever in readiness to supplement its efforts.

FEES FOR INSPECTION OF VESSELS.

The Secretary of the Treasury sends the following note to the National Board of Health:

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,
Washington, D. C., May 12, 1881.

SIR: Your letter of the 7th instant is received, requesting a modification of the schedule of fees for medical examinations of persons on American vessels bound for the United States, established by department letter of November 29, 1880, in pursuance of the act to prevent the introduction of contagious or infectious diseases into the United States, approved June 2, 1879.

It appears that the fee of five dollars for inspections of persons where there are fifty or less upon a vessel, has been found very burdensome upon sailing vessels, and you recommend that it be modified by scaling, and "that consular officers at infected ports may remit at their discretion the collection of inspection fees from vessels without passengers that have paid the same within two months previous to the last inspection, provided there has been no change in their respective crews."

In accordance with your request, the schedule of fees prescribed in department letter of November 29, 1880, is hereby amended to read as follows:

Fees for medical examination of persons on vessels bound from foreign ports to ports in the United States, for twelve persons and under	$1 50
For over twelve and not over twenty persons	2 50
From twenty to one hundred, for each ten persons or less	1 00
Over one hundred, at the rate of	5 00

for each additional hundred persons.

And consular officers are hereby authorized, in their discretion, to abstain from the collection of such fees from vessels without passengers that have paid the same within two months previous to the last inspection, *provided* there has been no change in their respective crews.

Very respectfully,

WILLIAM WINDOM,
Secretary.

J. L. CABELL, M. D.,
President National Board of Health, Washington, D. C.

QUARANTINE REGULATIONS FOR MISSISSIPPI.

The following resolution was passed by the board of health of Harrison County, Miss., May 3:

Resolved by the board of health for Harrison County, Miss., That on and after the 15th day of May, 1881, all vessels arriving at the ports of said county from infected ports shall be subjected to a quarantine of ten days or more, at the discretion of the health officer, said quarantine to continue until otherwise ordered.

Dr. T. S. Scales, inspector for the National Board of Health at Ship Island, acknowledges the receipt of the above resolution, and will carry its provisions into effect.

QUARANTINE PROCLAMATION.

The following proclamation has been issued by the mayor of Pensacola, Fla.:

MAYOR'S OFFICE, *April* 18, 1881.

At a meeting of the board of health, held April 16, 1871, it was—

Resolved, That the mayor shall issue his proclamation directing the establishment of quarantine, the same to commence on 1st day of May, 1881, and remain in force until removed by the board of health.

In obedience to the above resolution, notice is hereby given that on and after the 1st proximo, quarantine will go into effect. Pilots and masters of tugs, bringing vessels into port, will hoist a flag at half-mast at the fore, and take them to the buoy off Deer Point, where they will remain until disposed of by the quarantine physician. No person after that date will be permitted to go on board of said vessel until boarded by quarantine physician, and released from quarantine. The naval guard stationed at Deer Point, by courtesy of the naval authorities, are clothed with the execution of the rules of board of health.

The orders of the guard, in executing said rules and instructions, must be respected by all vessels and persons in the bay, between Clapp's Woods on west side of Quarantine Station and Town Point, and extending to a line across Santa Rosa Sound, three miles east of Deer Point.

By order of the board of health.

J. M. TARBLE, *Mayor*.

S. T. PONS, *Quarantine Clerk*.
PENSACOLA, *April*, 1881.

[Continued from BULLETIN No. 44.]

THE ORIGIN AND GROWTH OF THE QUARANTINE SYSTEMS OF THE UNITED STATES.

By STEPHEN SMITH, A. M., M. D., of New York.

MASSACHUSETTS—Continued.

In 1701-'02 "An act providing in case of sickness," was passed:

Be it enacted by the Lieutenant Governour, Council, and Representatives in General Court assembled, and by the authority of the same,

. . . . . .

SECT. 4. That if any person or persons, seamen or passengers, belonging to or transported in any ship or vessel, arriving to any port or harbour within this province, happen to be visited with the plague, small pox, pestilential or malignant fever, during the voyage, or to come from any place where such sickness prevails and is common, any justice or justices of the peace within the county, to whom the notice or information thereof shall be given, shall forthwith take care to prevent and restrain all persons belonging to or transported in such ship or other vessel from coming on shore, and if any be before on shore to send them on board again, as also to restrain persons from going on board such ship or vessel; and to that end may make out a warrant, directed to the sheriff of the county or his deputy, or constables of the same town, who are accordingly impowred, and required to execute the same.—

And such justice or justices are forthwith to transmit the intelligence thereof to the governour or commander-in-chief for the time being, who is hereby impowred, with the advice and consent of the council, to take such further order therein as they shall think fit for preventing the spreading of the infection.

[*Passed June* 25; *Published June* 28.]

Hitherto the Province of Massachusetts Bay had been without a quarantine hospital; accordingly, on the 11th of June, 1716, a committee was appointed to investigate a proper location. On the 23d November, in the same year, they made the following report:—

Nov. 23, 1716. The report of the Committee appointed the eleventh of June last to Investigate a suitable Place for an Hospital for infectious Persons viz.

In Obedience to the aforegoing Order We have searched both by Land and Water the most convenient Places in & about Boston Harbour, & find Spectacle Island & Squantum Neck to be the two most convenient Places for such an Hospital, & discoursed the owners about it.

Mr Bill refuses to sell any Part of Spectacle Island in Fee, but demands ten Pounds per Annum for the Use of one Acre of his Land for that Service. Mr Bull demands Fifty Pounds for one Acre in Fee upon the South East Part of the Moon, and Liberty to pass and repass, Which Place being equally convenient with the other, besides that it is to be bought outright, that it lies more out of the common Road of Shipping & that it can be come at both by Water & Land, We recommend that as the fittest place: We herewith offer the Draught of a House, Which we reckon most agreeable to that occasion, The Charge whereof with a Well, Fencing, a Shed to House infectious Goods in & other Accommodations We compute will amount to between One Hundred & fifty & Two Hundred Pounds: We offer also some Minutes Which we judge convenient to be drawn into An Act: All which is humbly submitted to this Honble Court

By Order of the Committee

ADAM WINTHROP

Boston Nov. 15, 1716

The following Vote pass'd in the House of Representatives upon the aforegoing Report of the Committee; Read and Concur'd: Viz,

"Voted that this Report be so far Accepted, that the Acre of Land mentioned therein on Squantum Neck with necessary Privileges be purchased & paid for out of the publick Treasury, The Title to be vested in the Province Treasury for the Time being for the Use of this Province.

That One Hundred & fifty Pounds be allowed out of the publick Treasury for erecting necessary Buildings &c. thereon; That Samuel Thaxter & William Payne, Esqrs be a Committee to take Care for the Building & Fitting the Hospital as soon as may be; And that the said Committee prepare and lay before this Court a Draught of a Bill enacting as they shall think necessary on this Occasion.

Consented to, SAMLL SHUTE

[*Council Records, Vol. X., pp.* 122-3.]

"April 11, 1717. The following Order pass'd in the House of Representves Read and Concur'd; Viz, Upon Reading a Petition of a considerable Number of the Inhabitants of the Towns of Dorchester, Braintree & Milton Praying that a Hospital for the Entertainment of Infectious Persons may not be Erected on Squantum Neck in Dorchester aforesaid, As has been proposed in the Committees Report appointed for that Purpose. Ordered that Adam Winthrop, William Payne, Samuel Thaxter & Jonathan Dowse Esqrs be a Committee to find out & agree for a more suitable Place for the Building a Hospital, That it may be Erected with all convenient Speed;

Consented to, SAMLL SHUTE."

[*Ibid., pp.* 141-2.]

"May 15, 1717. In answer to a motion of a Committee of ye Genll Assembly,

Voted, That the Selectmen be impowered to Lease a piece of Land on Dere Island not exceeding one acre, for a Term not exceeding ninty nine years to be improved for the erecting an Hospitall or Pest House there for the reception and entertainment of sick persons comeing from beyond sea, and in order to prevent the Spreading of Infection." [*Boston town-records, Vol.* 2, *p.* 373.]

Aug. 9, 1717. Samuel Bill and wife conveyed, for £100, to Jeremiah Allen, treasurer of the province, and his successors, the southerly end of Spectacle Island. (See Suffolk Registry of Deeds, lib. 32, fol. 44.) By this deed it appears that the cellar of the hospital had been already dug. (See, further, Shurtleff's Topographical and Historical Description of Boston, pp. 512-515.)

"Oct. 29, 1717. An Accompt of the Charges on the Hospital built on Spectacle Island amounting to One Hundred & seventy three Pounds, Was given in to the House of Representatives by Coll. Thaxter and Mr Wm Payne

Read & Committed; Read & Resolved that so much be further allowed & paid out of the publick Treasury, as with what has been already paid on this Account shall make up the sum of One Hundred and seventy three Pounds to discharge this Accompt.

And the Committee are desired to proceed in making a Fence & Well at the best Rate they can: Sent up for Concurrence, Read & Concur'd:—

Consented to, SAMLL SHUTE

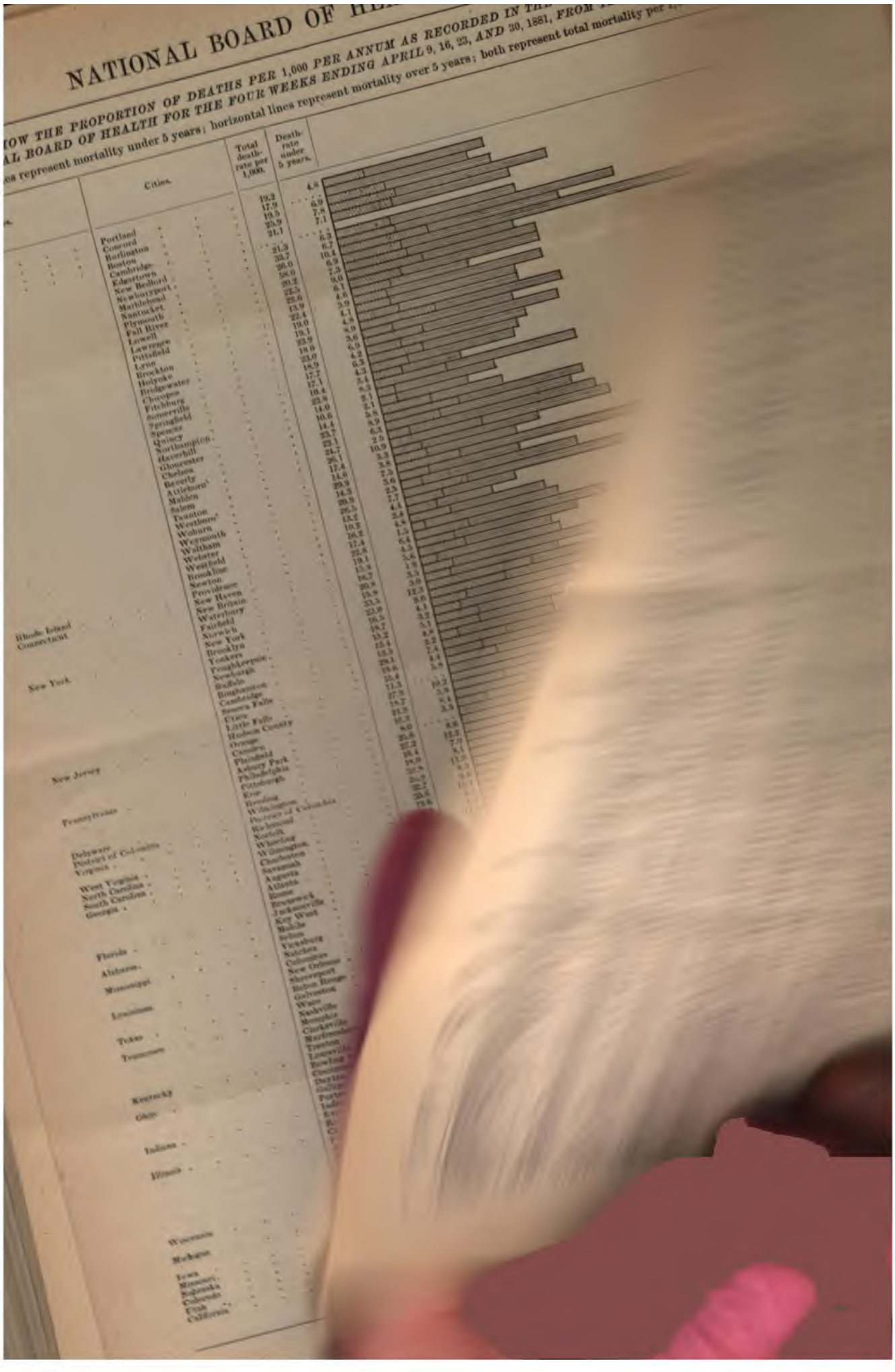
Council Records, p. 188.

"Nov. 28, 1719. A Petition of Samuel Bill of Boston shewing that upon his Petition presented to the General Assembly at their Session in October 1718 he obtained a Vote for Three Pounds as a Recompence for his Damage sustained from those that were Ordered by this Government to abide on Spectacle Island, that he humbly conceives his Allowance would have been much greater had he particularly sett forth his Damage, which is as follows, While the Hospital was building on the said Island seventy Passengers from Ireland, in a Vessel that had the Small Pox were put on Shoar on the Island by Order of the Government & tarried there six Weeks in which time they trod down several Acres of Grass fit for Mowing, & cut down nine or ten large Trees, that some of the poor People being sick and in perishing Circumstances, the Petitioner spent above three Pounds in Relieving them, that since the Building the Hospital he has supplied it with Water & has been serviceable in Making Fires & looking after the said Hospital, the Key thereof being committed to him, & that he takes Care that it be wholesome & fit for the Reception of sick People; And therefore humbly Praying that this Honble Court would consider his Losses & how slender an Allowance has been already made for the same, And seeing they have been occasioned by the Act of the Government, in Placing the Hospital on the said Island & Ordering sick People there, That they would in their great Justice & Goodness Order him such an Allowance, as they shall think proportionable to his Services & Damages as aforesaid.

In the House of Representatives: Read & Resolved that the Sum of Twelve Pounds be allowed and paid out of the publick Treasury to Samuel Bill the Petitioner in full of all damages mentioned in his Petition. In Council: Read & Concur'd:—

Consented to, SAMLL SHUTE"

[This article will be continued in a future BULLETIN.]


NATIONAL BOARD OF HE
OW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN TH
AL BOARD OF HEALTH FOR THE FOUR WEEKS ENDING APRIL 9, 16, 23, AND 30, 1881, FROM
es represent mortality under 5 years; horizontal lines represent mortality over 5 years; both represent total mortality per
Cities.
Total death-rate per 1,000.
Death-rate under 5 years.
Portland 19.2 4.8
Concord 17.9 6.9
Burlington 19.5 7.8
Boston 25.9 7.1
Cambridge 21.1 6.3
Edgartown 21.3 6.7
New Bedford 23.7 10.4
Newburyport 26.0 6.9
Marblehead 18.0 7.3
Nantucket 20.2 9.0
Plymouth 27.5 6.1
Fall River 22.6 4.6
Lowell 13.9 3.9
Lawrence 22.4 4.1
Pittsfield 19.0 4.8
Lynn 19.1 4.9
Brockton 23.9 3.6
Holyoke 18.0 6.9
Bridgewater 23.0 4.2
Chicopee 18.9 6.3
Fitchburg 17.7 4.3
Somerville 17.1 3.4
Springfield 19.4 3.3
Spencer 23.8 2.1
Quincy 14.0 3.8
Northampton 10.6 8.9
Haverhill 14.4 6.3
Gloucester 23.7 2.5
Chelsea 23.1 10.9
Beverly 24.7 3.3
Attleboro' 26.1 3.8
Malden 17.4 2.3
Salem 14.6 3.6
Taunton 23.9 2.3
Westboro' 14.3 7.7
Woburn 20.9 4.4
Weymouth 26.5 3.8
Waltham 13.2 4.8
Webster 10.2 1.5
Westfield 16.2 6.4
Brookline 17.4 4.5
Newton 22.8 3.6
Providence 19.1 1.9
New Haven 16.7 3.3
New Britain 20.8 3.0
Waterbury 15.9 12.3
Fairfield 23.3 3.0
Norwich 23.0 4.1
New York 16.5 3.7
Brooklyn 18.7 3.1
Yonkers 13.2 3.8
Poughkeepsie 15.4 3.2
Newburgh 12.5 7.4
Buffalo 20.1 4.4
Binghamton 19.6 3.8
Cambridge 15.4
Sweets Falls 17.3 10.3
Utica 17.9 5.3
Little Falls 18.7 6.1
Hudson County 21.5 3.3
Orange 25.2 8.6
Camden 25.6 12.3
Plainfield 22.2 7.9
Asbury Park 18.4 8.1
Philadelphia 18.0 11.3
Pittsburgh 21.4 6.3
Erie 21.7 8.3
Reading 22.4 11.1
Wilmington 21.6
District of Columbia
Richmond
Norfolk
Wheeling
Wilmington
Charleston
Savannah
Augusta
Atlanta
Rome
Brunswick
Jacksonville
Key West
Mobile
Selma
Vicksburg
Natchez
Columbus
New Orleans
Shreveport
Baton Rouge
Galveston
Waco
Nashville
Memphis
Clarksville
Fort Smith
Trenton
Louisville
Newport
Cincinnati
Dayton
Gallipolis
Portsmouth
Indianapolis
Evansville
Chicago
Rhode Island
Connecticut
New York
New Jersey
Pennsylvania
Delaware
District of Columbia
Virginia
West Virginia
North Carolina
South Carolina
Georgia
Florida
Alabama
Mississippi
Louisiana
Texas
Tennessee
Kentucky
Ohio
Indiana
Illinois
Wisconsin
Michigan
Iowa
Missouri
Nebraska
Colorado
Utah
California

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 7, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	12	18.5	33,480	330	12	.....	18.7	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....
	Bangor	16,857	6	18.5	16,764	93	6	.....	18.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H.	Concord	13,838	8	30.2	13,771	67	8	.....	30.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Vt.	Burlington	11,364	3	13.8	11,248	116	3	.....	14.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass	Boston	362,535	172	24.7	356,565	6,000	167	5	24.6	43.5	.....	.....	55	1	.....	.....	9	.....	.....	.....	33	1	6	.....
	Cambridge	52,740	28	27.5	51,222	1,518	28	.....	28.5	.....	.....	.....	10	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
	Edgartown	1,301	.....	.....	1,238	63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Bedford	26,875	5	9.7	25,349	1,526	5	.....	10.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Newburyport	13,537	3	11.6	13,469	68	3	.....	11.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Marblehead	7,467	6	41.8	7,451	16	6	.....	41.8	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Plymouth	7,094	.....	.....	6,930	164	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fall River	49,006	14	14.9	48,846	160	14	.....	15.0	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Nantucket	3,726	4	55.3	3,657	69	4	.....	55.5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lawrence	39,000	14	18.6	39,026	152	14	.....	18.7	.....	.....	.....	5	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....
	Lowell	59,485	28	24.6	59,307	178	28	.....	24.6	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....
	Pittsfield	13,367	2	7.8	13,047	320	2	.....	8.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lynn	38,284	18	24.5	37,730	554	17	1	23.5	.....	.....	.....	2	.....	.....	.....	.....	1	1	.....	3	.....	1	.....
	Brockton	13,608	4	15.3	13,569	39	4	.....	15.3	94.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Holyoke	21,851	7	16.7	21,822	29	7	.....	16.7	.....	.....	.....	4	.....	.....	.....	3	.....	.....	.....	2	.....	.....	.....
	Bridgewater	3,620	.....	.....	3,594	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Milford	9,310	3	16.8	9,267	43	3	.....	16.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Chicopee	11,325	3	13.8	11,324	1	3	.....	13.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fitchburg	12,405	9	37.9	12,368	37	9	.....	40.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....
	Somerville	24,985	9	18.8	24,906	79	9	.....	18.9	.....	.....	.....	6	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....
	Springfield	33,340	10	15.7	32,592	748	10	.....	16.0	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Spencer	7,466	.....	.....	7,459	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Quincy	10,529	.....	.....	10,439	90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Northampton	12,172	6	26.0	12,044	128	6	.....	26.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	North Adams	10,192	2	10.3	10,133	59	2	.....	10.4	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Haverhill	18,475	6	17.0	18,306	169	6	.....	17.2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Gloucester	19,329	8	21.9	19,309	20	8	.....	21.9	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Chelsea	21,785	3	7.0	21,253	532	3	.....	7.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Clinton	8,030	1	6.5	8,019	11	1	.....	6.5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Beverly	8,445	2	12.6	8,421	24	2	.....	12.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Attleborough	11,111	5	23.5	10,975	136	4	1	23.7	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....
	Malden	12,017	4	17.4	11,959	58	4	.....	17.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Salem	27,598	9	17.0	27,396	202	8	1	15.2	258.2	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Taunton	21,213	11	26.7	21,102	111	11	.....	26.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Westboro'	5,214	3	30.0	5,178	36	3	.....	30.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Woburn	10,938	5	23.9	10,907	31	5	.....	24.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Weymouth	10,571	1	5.0	10,521	50	1	.....	5.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Waltham	11,711	5	22.1	11,692	19	5	.....	22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Webster	5,696	2	18.3	5,652	44	2	.....	18.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Westfield	7,587	7	47.4	7,525	62	6	1	41.6	841.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Brookline	8,053	4	25.9	8,036	17	4	.....	26.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Newton	16,995	5	15.1	16,780	215	5	.....	15.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
R. I.	Providence	104,855	53	26.4	101,209	3,646	47	6	24.2	82.4	.....	.....	13	2	.....	.....	2	.....	.....	.....	9	1	.....	.....
Conn	New Haven	62,882	14	11.6	60,654	2,228	14	.....	12.0	.....	.....	.....	5	.....	.....	.....	1	.....	.....	.....	3	.....	.....	.....
	New Britain	13,978	2	7.5	13,903	75	2	.....	7.6	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Waterbury	20,269	6	15.4	20,117	152	6	.....	15.5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Fairfield	3,748	.....	.....	3,603	145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Norwich	21,141	10	24.3	20,579	562	9	1	22.8	92.5	.....	.....	2	.....	.....	.....	1	.....	1	.....	1	1	.....	.....
N. Y.	New York	1,206,577	770	33.3	1,186,144	20,433	751	19	33.0	48.5	.....	.....	309	.....	.....	.....	35	.....	25	.....	113	.....	32	.....
	Brooklyn	566,689	267	24.6	558,474	8,215	261	6	24.4	38.1	.....	.....	108	2	.....	.....	8	1	2	.....	23	1	3	.....
	Yonkers	18,892	4	11.0	18,528	364	4	.....	11.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Poughkeepsie	20,207	6	15.5	19,513	694	6	.....	16.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Rochester	89,363	33	19.3	88,845	518	33	.....	19.4	.....	.....	.....	14	.....	.....	.....	2	.....	.....	.....	4	.....	.....	.....
	Buffalo	155,159	49	16.5	154,292	845	48	1	15.9	61.7	.....	.....	15	.....	.....	.....	2	.....	1	.....	6	1	.....	.....
	Watertown	10,697	2	9.8	10,589	108	2	.....	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Cambridge	1,850	.....	.....	1,800	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Newburg	18,050	6	17.3	17,480	570	6	.....	17.9	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....
	Utica	33,913	10	15.4	33,669	244	10	.....	15.5	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	3	.....	.....	.....
	Little Falls	6,910	2	14.7	6,836	74	2	.....	15.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J.	Hudson Co.	187,950	92	25.5	186,254	1,696	.....	.....	.....	.....	.....	.....	33	.....	.....	.....	6	.....	1	.....	4	.....	4	.....
	Newark	136,400	38	14.5	133,074	3,326	36	2	14.2	31.4	.....	.....	18	.....	.....	.....	.....	.....	1	.....	5	.....	2	.....
	Orange	13,206	8	31.6	12,749	457	8	.....	32.7	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Camden	41,658	18	22.5	38,064	3,594	17	1	23.3	14.4	.....	.....	8	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
	Plainfield	8,126	2	13.0	7,633	493	2	.....	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Asbury Park	1,640	.....	.....	1,584	56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa	Philadelphia	846,980	382	23.5	815,182	31,798	349	33	22.3	54.1	.....	.....	122	.....	.....	.....	5	.....	.....	.....	56	8	2	1
	Pittsburgh	156,381	86	28.7	152,290	4,091	83	3	28.4	39.1	.....	.....	39	1	.....	.....	4	.....	9	1	6	1	.....	.....
	Erie	27,730	7	13.2	27,499	231	7	.....	13.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Reading	43,280	22	26.5	42,926	354	22	.....	26.8	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Del	Wilmington	42,499	32	39.3	37,023	5,476	24	8	33.8	57.1	.....	.....	5	4	.....	.....	.....	.....	.....	.....	2	1	1	.....
D. C.	Dist. of Col.	180,000	75	21.7	120,000	60,000	39	36	16.9	31.2	.....	.....	7	19	.....	.....	.....	1	1	.....	10	9	.....	.....
Va	Norfolk	21,966	15	35.6	11,933	10,033	8	7	35.4	35.9	.....	.....	1	3	.....	.....	.....	.....	.....	.....	3	1	.....	.....
	Richmond	63,803	27	22.1	35,756	28,047	8	19	11.7	35.7	.....	.....	1	7	.....	.....	.....	.....	.....	.....	2	6	.....	.....
	Lynchburg	15,959	5	16.3	7,484	8,475	2	3	13.9	18.9	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....
W. Va.	Wheeling	31,266	12	19.5	30,551	715	12	.....	20.4	.....	.....	.....	6	.....	.....	.....	2	.....	.....	.....	2	.....	.....	.....
N. C.	Wilmington	17,361	6	18.1	6,983	10,468	2	4	15.1	19.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C.	Charleston	49,999	25	26.1	22,713	27,286	10	15	23.3	28.5	.....	.....	4	2	.....	.....	.....	1	.....	.....	1	.....	.....	.....
Ga	Augusta	23,023	8	18.1	12,364	10,659	6	2	25.2	9.9	.....	.....	2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Atlanta	37,421	11	15.1	21,086	16,335	7	4	17.1	12.7	.....	.....	5	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
	Savannah	30,681	21	35.7	15,007	15,674	5	16	17.4	51.4	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	1	3	.....	.....
	Rome	3,877	3	40.2	2,154	1,723	.....	3	.....	90.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brunswick	2,891	1	18.0	1,445	1,446	.....	1	.....	36.9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla	Jacksonville	5,563	5	46.9	3,095	2,468	3	2	51.6	42.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Key West	9,890	7	36.9	6,746	3,144	5	2	38.7	33.0	.....	.....	3	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....
Ala	Mobile	31,205	14	23.4	16,837	14,368	6	8	18.5	29.1	.....	.....	1	4	.....	.....	.....	.....	1	.....	1	1	1	.....
	Selma	7,529	2	13.9	3,345	4,184	1	1	15.2	12.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Miss	Columbus	5,519	.....	.....	1,933	3,586	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Natchez	7,058	.....	.....	3,421	3,637	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Vicksburg	11,814	5	22.1	5,975	5,839	2	3	17.9	27.0	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
	Verona	1,000	.....	.....	650	350	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La	New Orleans	216,140	137	33.0	159,128	57,231	85	52	28.0	46.6	.....	.....	.....	1	.....	.....	.....	1	.....	.....	11	8	.....	.....
	Shreveport	11,017	3	14.2	3,739	7,276	.....	3	.....	21.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 7, 1881.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.															
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
												2		2						1								3		Portland	Me.
												3																3		Bangor	
												3																4		Concord	N. H.
																						1						2		Burlington	Vt.
2		15				2				2		17				3						2						76	4	Boston	Mass.
		3										1				2		1		1								18		Cambridge	
																														Edgartown	
1												1																2		New Bedford	
																												3		Newburyport	
												1																4		Marblehead	
																														Plymouth	
						1						1		1														8		Fall River	
												1		2														1		Nantucket	
1						1						1																8		Lawrence	
						4						1				1						1						18		Lowell	
																												2		Pittsfield	
						1				1		1		1		1						2						5		Lynn	
																1												1		Brockton	
						1																1								Holyoke	
						1																								Bridgewater	
																												2		Milford	
																												3		Chicopee	
																												6		Fitchburg	
		1								1		1																3		Somerville	
												1				1												8		Springfield	
																														Spencer	
																														Quincy	
		1										2																3		Northampton	
																				2										North Adams	
												2								1								2		Haverhill	
												1																5		Gloucester	
																												2		Chelsea	
																1														Clinton	
																												1		Beverly	
												1																1		Attleborough	
																												2		Malden	
										1		1																6	1	Salem	
										1		1																6		Taunton	
												2																3		Westboro'	
																												2		Woburn	
																														Weymouth	
																												3		Waltham	
																														Webster	
												1	1															4		Westfield	
		1		1														1												Brookline	
		1				1																						1		Newton	
1		3				2	1			1		2				1	1			1		1						24	3	Providence	R. I.
		1										2																7		New Haven	Conn
																												2		New Britain	
																												4		Waterbury	
																														Fairfield	
																												6		Norwich	
12		55		7		8		14		48		87				40				10		5		12		5		272		New York	N. Y.
3		33	1	3		1		7		21		31		1		8		1				4				1	1	111	2	Brooklyn	
								1																				3		Yonkers	
																												4		Poughkeepsie	
		3										4				3						1						16		Rochester	
		1				3				2		8				1				1								23		Buffalo	
																												2		Watertown	
																														Cambridge	
												1																3		Newburg	
						1				1		1																3		Utica	
																												2		Little Falls	
1		1						2		3		14				3						6		3				44		Hudson Co.	N. J.
2		2		1		2				2		3				1		1				1						13	2	Newark	
												2				1												4		Orange	
								2		3																		10	1	Camden	
																												2		Plainfield	
																														Asbury Park	
2		12				10	1			14		26	1	3		8	3	1				3		28	7	2		177	12	Philadelphia	Pa.
2		6				2				6		4		2		1	1			1		2		3		2		33		Pittsburgh	
				1				1				1																3		Erie	
						1				1		6																13		Reading	
						1		3		2														4	4			11	3	Wilmington	Del.
1	2	3							1			2	6	2	1		1											20	15	Dist. of Col.	D. C.
												2					1											3	5	Norfolk	Va.
						1	1						1							1				1					4	10	Richmond	
																1													2	Lynchburg	
2		1																										5		Wheeling	W. Va.
	1									1																		1	3	Wilmington	N. C.
					2		1			6	2	2										1						2	7	Charleston	S. C.
1																				1								3	2	Augusta	Ga.
										1										2								2	4	Atlanta	
	2					1						1		1		2										1		3	6	Savannah	
												1										1							1	Rome	
																												1		Brunswick	
																													2	Jacksonville	Fla.
2																												2	1	Key West	
1																	1											2	6	Mobile	Ala.
																												1		Selma	
																														Columbus	Miss.
																														Natchez	
																1												1	1	Vicksburg	
																														Verona	
20	7	2				1			2	8	4	5	4			1				1		1						35	26	New Orleans	La.
																													2	Shreveport	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 7, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
La	Baton Rouge	7,217	1	7.3	2,917	4,300	.....	1	.....	12.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex	San Antonio	20,561	15	38.6	17,525	3,036	14	1	41.9	17.2	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Austin	10,960	3	14.3	7,349	3,611	2	1	14.2	14.6	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Waco	7,296	6	42.7	4,716	2,580	5	1	55.3	20.2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Galveston	22,253	13	30.5	16,900	5,353	12	1	36.4	9.9	.....	.....	7	.....	.....	.....	.....	.....	.....	1	.....	3	.....	.....
	Marshall	5,622	3	27.8	2,836	2,786	2	1	36.6	18.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Ark	Little Rock	13,185	10	39.6	8,636	4,549	4	6	34.4	68.4	.....	.....	2	1	.....	.....	.....	.....	.....	1	.....	2	.....	.....
Tenn	Nashville	43,461	13	15.6	27,004	16,457	5	8	9.7	25.7	.....	.....	2	3	.....	.....	.....	.....	.....	.....	1	2	.....	.....
	Memphis	33,593	20	31.9	18,622	14,971	7	13	19.5	45.2	.....	.....	2	3	.....	.....	.....	5	.....	.....	2	2	.....	.....
	Clarksville	3,860	7	94.5	2,134	1,726	.....	7	.....	211.4	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Murfreesboro'	3,800	4	54.4	1,777	2,023	1	3	29.8	74.4	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Trenton	1,400	2	74.5	828	555	2	.....	126.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Ky	Louisville	123,763	54	22.8	102,842	20,920	34	20	17.2	49.8	.....	.....	8	7	.....	.....	.....	.....	.....	.....	9	6	.....	.....
	Bowling Green	5,111	3	30.6	3,254	1,857	3	.....	48.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio	Cincinnati	255,708	100	20.4	247,538	8,170	97	3	20.4	19.5	.....	.....	37	.....	.....	.....	5	.....	3	.....	24	3	.....	.....
	Cleveland	160,140	55	17.9	158,094	2,048	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....	4	.....	1	.....
	Gallipolis	4,400	2	23.6	3,474	926	1	1	14.8	56.3	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....
	Dayton	38,677	17	22.8	37,684	993	17	.....	23.3	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	5	.....	1	.....
	Portsmouth	11,314	4	18.4	10,346	968	3	1	15.0	53.9	.....	.....	2	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....
Ind	Indianapolis	75,074	25	17.4	68,558	6,516	22	3	16.9	24.0	.....	.....	7	.....	.....	.....	1	.....	1	.....	6	.....	.....	.....
	Richmond	12,743	5	20.5	12,106	637	5	.....	21.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Evansville	29,280	6	10.7	26,563	2,717	4	2	7.8	38.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....
Ill	Chicago	503,304	300	31.1	496,620	6,684	300	.....	31.5	.....	.....	.....	184	.....	.....	.....	11	.....	9	.....	18	.....	8	.....
	Peoria	29,315	7	12.5	28,821	494	7	.....	12.7	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
	Aurora	11,825	2	8.8	11,612	213	2	.....	8.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Jacksonville	10,927	4	19.1	10,222	705	3	1	15.4	70.0	.....	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	Elgin	8,789	6	35.7	8,647	142	6	.....	36.0	.....	.....	.....	1	.....	.....	.....	3	.....	1	.....	.....	.....	.....	.....
	Moline	7,805	5	33.4	7,673	132	5	.....	34.0	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....
	Rock Island	11,660	9	39.3	11,473	187	9	.....	39.7	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....
	Lake	18,396	5	14.2	18,385	11	5	.....	14.2	.....	2,704	3	3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Wis	Milwaukee	115,578	64	28.9	115,275	303	64	.....	29.0	.....	.....	.....	36	.....	.....	.....	3	.....	4	.....	6	.....	1	.....
Minn	Saint Paul	41,498	12	15.1	41,000	498	12	.....	15.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....
Mich	East Saginaw	19,016	7	19.2	18,182	134	7	.....	19.3	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Flint	8,419	4	24.8	8,162	247	4	.....	25.6	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Lansing	8,319	2	12.7	8,109	210	2	.....	12.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Iowa	Keokuk	12,117	3	12.9	11,066	1,051	2	1	8.7	49.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Mo	Saint Louis	350,522	124	18.5	328,232	22,290	115	9	18.3	21.4	.....	.....	37	1	.....	.....	4	.....	18	1	14	1	.....	.....
	Kansas City	55,813	14	13.1	47,637	8,176	12	2	13.1	13.0	.....	.....	4	.....	.....	.....	.....	.....	2	.....	1	2	.....	.....
Nebr	Omaha	30,518	8	13.7	29,680	838	7	1	12.2	62.2	.....	.....	3	1	.....	.....	1	.....	2	.....	.....	.....	.....	.....
Kans	Lawrence	8,511	1	6.1	6,515	1,996	.....	1	.....	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Utah	Salt Lake City	20,768	9	22.6	20,591	177	9	.....	22.8	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo	Boulder	3,069	1	17.0	3,024	45	1	.....	17.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Cal	San Francisco	233,956	68	15.2	210,515	23,441	56	12	13.8	27.1	.....	.....	18	.....	.....	.....	5	1	.....	.....	8	2	.....	.....
	Vallejo	6,587	1	7.9	6,303	284	1	.....	8.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Total	8,187,454	3,784	23.8	.....	.....	.....	.....	.....	.....	.....	.....	1,278	79	.....	.....	124	12	97	8	472	70	63	1

NOTE.

San Francisco, Cal., total, 233,956; white, 210,515; colored, 23,441, viz: Chinese, 21,745; Negroes, 1,604; Japanese, 46; Indians, 44; half-breeds, 2.
Sacramento, Cal., total, 21,420; white, 19,180; colored, 2,240, viz: Chinese, 1,762; Negroes, 474; Indians, 4.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

DAVID'S ISLAND, N. Y.—Under date of May 11, Surgeon George P. Jaquette, U. S. A., reports that two cases of small-pox had recently occurred at the post; one has recovered and the other is still under treatment. No details are given as to the history or the origin of the disease. The post is some 30 miles from New York City.

FORT LARAMIE, WYO.—Acting Assistant Surgeon A. P. Frick, U. S. Army, reports the arrival at the post on April 17, of a boy six years of age, who had left Wilmington, N. C., April 11, and came by way of Washington, Saint Louis, Omaha, and Cheyenne. Immediately after arriving at the post, scarlet fever was developed, and if eight days be allowed for incubation, the infection must have been received at Wilmington, while a shorter period assigned would leave the case due to infection upon the route.

HAVANA, CUBA.—During the week ending April 29, there were 2 deaths from yellow fever, 20 from typhoid fever, and 41 from small-pox.

During the week ending May 5 there was but 1 death from yellow fever. Typhoid fever caused 10 deaths and small-pox 24. At the close of the week no case of yellow fever was known to exist among the shipping.

MUSCATINE, IOWA.—Under date of May 9, Dr. W. S. Robertson, president of the State board of health, announces the election of Dr. R. J. Farquharson as secretary of the board.

NASHVILLE, TENN.—The secretary of the State board of health gives the date of March 30, 1881, for the passage of the act providing for registration of births, marriages, and deaths in Tennessee. The act was published in No. 42 of the Bulletin, p. 766, but the date was not given.

PATERSON, N. J.—Dr. W. K. Newton, under date of May 13, gives the following list of gentlemen appointed as public analysts by the New Jersey State board of health, under the act published in the BULLETIN May 7:

C. F. Brackett, M. D., Ph. D., president of council, and professor of physics, Princeton College.
William H. Newell, M. D., clerk of council, Jersey City.
H. B. Cornwall, professor of analytical chemistry, Princeton College.
A. R. Leeds, Ph. D., professor of chemistry, Stevens Institute, Hoboken.
William K. Newton, M. D., Paterson, N. J.
Shippen Wallace, analytical chemist, Burlington.
F. C. Van Dyck, professor of chemistry, Rutgers College, New Brunswick.

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TULLIO S. VERDI, M. D., &c. 815 Fourteenth street, N. W., Washington, D. C.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	Apr. 30	3	34.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
Canada	Kingston	15,000	May 7	5	16.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.6
Do	Montreal	135,000	Apr. 23	47	18.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	42.9
Do	....do	135,000	Apr. 30	77	29.8	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	7	49.9
Bermuda	Hamilton	14,687	May 10	2	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.5
Cuba	Havana	195,437	Apr. 30	182	48.6	.....	.....	.....	2	.....	37	.....	24	.....	.....	.....	.....	80
West Indies	St. Thomas	15,000	Apr. 1	8	27.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	15,000	Apr. 8	6	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	15,000	Apr. 15	14	55.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	15,000	Apr. 22	15	59.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Do	....do	15,000	Apr. 29	14	55.7	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guadeloupe	Point-a-Pitre	22,919	Apr. 16	17	69.6	.....	9	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hayti	Cape Haytien	10,000	Mar. 12	12	62.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	10,000	Mar. 19	9	47.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	... do	10,000	Mar. 26	8	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	10,000	Apr. 2	3	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	10,000	Apr. 8	8	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	10,000	Apr. 16	9	47.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	10,000	Apr. 23	8	41.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	10,000	Apr. 30	7	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	Vera Cruz	20,000	Apr. 24	22	58.1	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	25.4
Do	....do	20,000	May 1	21	55.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27.0
Aspinwall	Colon	3,000	Apr. 30	6	103.3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	85
Do	....do	3,000	May 7	1	17.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
Azores	Fayal (Orta)	7,630	Mar. 5	1	6.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
Do	....do	7,630	Mar. 12	3	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
Do	... do	7,630	Mar. 19	5	34.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
Teneriffe	Santa Cruz	16,610	Apr. 16	10	31.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	71
Ireland	Queenstown	10,000	May 30	7	36.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Belfast	230,000	Apr. 30	109	32.5	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	1	.....
Do	Dublin	333,401	Apr. 30	196	30.6	.....	.....	.....	.....	.....	.....	.....	8	.....	5	.....	4	49.7
Scotland	Dundee	140,000	Apr. 23	67	22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1	44.2
Do	Leith	59,958	Apr. 30	27	23.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
England	London	3,707,130	Apr. 23	1,600	22.5	.....	.....	.....	.....	.....	84	.....	12	.....	1	.....	135	43.5
Do	Liverpool	549,834	Apr. 30	264	25.0	.....	.....	.....	.....	1	.....	2	6	29	3	30	22	49.8
Do	Sheffield	284,403	Apr. 30	135	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.3
Do	Bradford	197,196	Apr. 23	70	17.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
Do	Tunstall	29,670	Apr. 30	10	17.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52.5
Wales	Cardiff	83,389	Apr. 30	20	12.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	53.7
France	Paris	1,988,806	Apr. 30	1,127	29.6	.....	.....	.....	.....	.....	21	.....	27	.....	.....	.....	109	.....
Do	Havre	92,068	Apr. 23	85	48.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.3
Do	Lyons	342,815	Apr. 9	167	25.4	.....	.....	.....	.....	.....	10	.....	2	.....	.....	.....	8	.....
Do	....do	342,815	Apr. 16	160	24.4	.....	.....	.....	.....	.....	16	.....	4	.....	.....	.....	7	.....
Do	Rouen	104,209	Apr. 30	51	25.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Zurich	25,329	Apr. 23	7	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Amsterdam	316,952	Apr. 23	159	26.2	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	3	47
Do	Rotterdam	152,515	Apr. 30	77	26.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32	.....	.....
Germany	Berlin	1,123,571	Apr. 16	516	23.9	.....	.....	.....	.....	9	.....	10	2	5	.....	115	80	47.1
Do	Bremen	112,200	Apr. 16	52	24.2	.....	.....	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....
Do	Barmen	95,000	Apr. 23	46	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45.5
Do	Breslau	273,000	Apr. 16	141	26.9	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	9	42.8
Do	Brunswick	75,000	Apr. 23	34	23.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5	42.7
Do	Cologne	144,750	Apr. 23	63	22.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	.....
Do	Frankfort	137,000	Apr. 16	54	21.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.1
Do	....do	137,000	Apr. 24	56	21.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	44.1
Do	Hamburg	400,000	Apr. 9	202	26.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....
Do	Mannheim	50,500	Apr. 30	24	23.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47.7
Bavaria	Nuremberg	99,519	Apr. 9	50	26.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	39.7
Do	Munich	230,000	Apr. 23	181	41.1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	19	.....
Belgium	Brussels	406,638	Apr. 16	201	25.7	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	6	.....
Do	....do	401,745	Apr. 23	204	26.4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	5	.....
Saxony	Leipsic	151,616	Apr. 23	76	26.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	43.5
Do	Dresden	220,216	Apr. 16	135	31.9	.....	.....	.....	.....	.....	.....	1	1	.....	.....	7	7	47.5
Denmark	Copenhagen	235,254	Apr. 19	105	23.3	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	18	.....	42.9
Austria	Vienna	731,191	Apr. 23	462	28.7	.....	.....	.....	.....	.....	29	.....	1	.....	.....	.....	14	47.4
Do	Trieste	128,295	Apr. 2	96	39.1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	3	.....
Do	... do	128,295	Apr. 9	86	35.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russian Poland	Warsaw	379,763	Apr. 16	142	19.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46.5
Sweden	Stockholm	169,423	Apr. 2	95	30.3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	27.7
Do	....do	173,431	Apr. 16	91	29.0	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	7	36.9
Spain	Cadiz	65,028	Apr. 16	22	17.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.8
Barbary	Tripoli	20,000	Apr. 16	7	18.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74.7
Do	....do	20,000	Apr. 23	8	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88.2
Cape Colony	Cape Town	35,000	Apr. 11	20	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
Egypt	Alexandria	220,000	Apr. 23	149	35.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
China	Shanghai	3,000	Mar. 29	2	34.8	.....	.....	.....	.....	7	.....	.....	.....	1	1	1	1	45.1
Do	....do	3,000	Apr. 5	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	54.8
Japan	Kobe	19,248	Apr. 2	17	48.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	19,248	Apr. 9	9	25.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

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AUTHOR
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National Board of Health

BULLETIN.

WASHINGTON, D. C., SATURDAY, MAY 28, 1881. [No. 48.

[Continued from BULLETIN No. 47.]

N AND GROWTH OF THE QUARANTINE SYSTEMS OF THE UNITED STATES.

STEPHEN SMITH, A. M., M. D., of New York.

MASSACHUSETTS—Continued.

he following act, "An act in addition to an act intiproviding in case of sickness'" was passed:—

ere is now provided at the charge of the province a con- on the island called Spectacle Island, for the reception ll be visited with contagious sickness, to keep them g of others,—*Be it therefore enacted by the Governour, Representatives in General Court assembled, and by the authority of the same.*

That the Keeper of the lighthouse and the commandCastle William shall notify and direct the masters of ning near them, wherein any infectious sickness is or en, at their coming in, to come to anchor as near the ed house as may be, that the sick persons and everyboard said ship that may give infection (proper to be put house), may be removed into it with the greater ease

at if any master or immediate commander of any such time being, in disobedience to such orders or contrary me with his vessel, or suffer her to be brought up above e, come himself, or suffer any of his people or passengers to come ashore, or any boats to come on board, or suffer any goods to be taken out of his vessel, without leave first obtained from the governour and council, or two justices of the peace, and the selectmen of the town of Boston, he shall, for every such offence, forfeit the sum of fifty pounds; and in case he be not able to pay that sum, he shall suffer six months' imprisonment. And the master of every such vessel is hereby directed and impowred to put into the said house, or where the said selectmen shall direct, all such goods as, in the opinion of said selectmen, may carry an infection in them, under the penalty aforesaid.

SECT. 3. That if any sailors or passengers coming in such vessel shall, without the knowledge or consent of the master, presume to come on shore, or up above the said castle, or if any person, from town or country, presume to go on board such vessel, or go to the aforesaid house or hospital in time of infection then, without leave from the authority aforesaid, or if any person put sick into the said house shall presume to go off the island without leave as aforesaid, every person offending in any of the abovementioned particulars shall forfeit the sum of ten pounds; and in case any person be not able to pay said sum he shall suffer two months' imprisonment.

SECT. 4. All the abovementioned fines to be sued for and recovered by the province treasurer, for the time being; one-third of the fines to be to his majesty for the use of this government, one-third to the informer, and one-third to the province treasurer, for the time being.

SECT. 5. And when and so often as any ship or other vessel shall come to any port or harbour within this province, wherein any infection or infectious sickness is or hath lately been, the justices and selectmen of such place be impowered immediately to order the said vessel and sick persons to the province hospital or house aforesaid, there to be taken care of according to the directions of this act. And when any such ship, vessel or persons cannot without great inconveniency and damage be ordered to the aforesaid house or hospital, in every such case the rules and directions of the aforementioned act already made in case of sickness are to be observed.

SECT. 6. And all repairs and whatsoever is necessary for the accommodation of such persons, shall be taken care of and provided for by the selectmen of the town of Boston aforesaid, at the immediate charge of the province: *provided, nevertheless*, that this is not to be understood to excuse any persons or towns, who, according to the afore-mentioned law, are obliged to defray the charge that may be occasioned by their sickness or confinement in the said hospital.

SECT. 7. This act to continue in force until the end of the session of this Court, which will begin in May, *anno* one thousand seven hundred and twenty-three, and no longer.

[*Passed February* 14, 1717–18.]

At a session held in May, 1723, the above act was continued until the end of the session of the general court in May, 1728.

In 1721–'22 an act was passed to oblige all ships and other vessels coming from France, and other parts of the world infected with the plague, to perform quarantine.

Whereas the plague and other pestilential and mortal distempers are oftentimes transported from one country to another, even over seas, in ships and goods, and the Kingdom of France, and other parts of the Mediterranean, are at this day sorely visited with the plague, and from thence vessels frequently arrive in this province, especially during the summer season, which it is to be feared may bring the pestilence into this country unless great care be taken to prevent the same,—

Be it enacted by His Excellency the Governour, Council, and Representatives in General Court assembled, and by the authority of the same,

SECTION. 1. That every ship or vessel coming from any of the ports of France, or the Mediterranean, shall, before they unlade any goods or part of their cargo, be obliged to perform quarentine at least forty days immediately after their arrival, at such place as shall be assigned by the governour and council for that purpose; and every master or commander of such ship or vessel, being notified of this act by some justice of the peace or publick officer, that shall presume to unlade any part of his goods or cargo, before he have perform'd such quarentine, or refuse to perform quarentine at such place as he is ordered by the governour and council, shall be deemed a felon, and suffer the pains of death.

SECT. 2. That if any master, passenger, sailor or other person on board any such ship or vessel, shall presume to come on shore until the said ship or vessel have performed her quarentine, or without express license obtain'd from the governour and council, he shall suffer three years' imprisonment without bail or mainprize.

SECT. 3. And the master or Keeper of the province lighthouse is hereby inpower'd and commanded to notify the commanders or masters, of all such ships or vessels arriving at or near Nantasket, that may be supposed to come from places infected with the plague, and give strict charge and notice of this act and the pains and penalties thereof.

SECT. 4. That all ships or vessels arriving from Newfoundland, Cape Breton, Canso, or those ports that have been at any time within the space of six months next preceding, in any part of France, or other places infected with the plague, or that have, during their being at Newfoundland, Cape Breton or Canso, taken on board any goods or lading coming from France or other places infected with the plague, shall also be obliged to perform quarentine, as aforesaid, and the master or commander thereof[1] under the same penalties, as aforesaid, as to unlading any part of their cargo, or refusing to perform quarentine, as aforesaid. And, for the better preventing the unlading or delivering of any goods out of any ship or vessel coming from any of the places aforesaid, before the master of such ship or vessel can or may be notified of this act, as before directed,—

SECT. 5. That in case it appear by due course of law, that any goods, wares or merchandize whatever be unladed or delivered out of such ship or vessel before she have perform'd her quarentine, as aforesaid, the master or commander of such ship or vessel shall forfeit and pay the sum of five hundred pounds, the one-half thereof to the use of him or them that shall inform and sue for the same, and the other half to be towards the support of his majesty's government of this province; and further suffer three years' imprisonment without bail or main prize.

SECT. 6. That any person or persons that shall any ways be aiding or assisting to unlade any goods or merchandize out of any ship or vessel coming from any of the aforesaid ports, or any other infected places, as aforesaid, shall pay a fine of one hundred pounds, one-half to him or them that shall inform or sue for the same in any court of record, and the other half to be to and for the use and support of his majesty's government of this province; and shall further suffer twelve months' imprisonment without bail or mainprize; any law, usage or custom to the contrary in any wise notwithstanding.

SECT. 7. This act to continue in force for the space of three years from the publication thereof, and no longer.

[*Passed September* 2.]

The cause which gave rise to the above act in all probability terminated before, or at the expiration of the three years, as no reënactment appears in the State records.

[1] *Sic.*

In 1728-'29 an act was passed entitled "An act in addition to an act entit[u]led 'An act providing in case of sickness.'"

This act is in substance the same as that passed in 1717-18, renewed in May, 1728, of which we quote only—

"SECT. 7. This act to continue in force until the end of the Session of this Court which will begin in May, one thous[an]d seven hundred and thirty-eight and no longer." [*Passed June* 19th; *published June* 24.]

The Spectacle Island Hospital continued for the reception of infectious diseases until the year 1737.

"From this time [meaning when the hospital was finished and made comfortable for the entertainment of the sick], things went on well at the hospital; repairs, when needed, were made, and everything required for comfort was provided by the town, and paid for by the province. In January, 1735-6, a committee was appointed, and further impowered on the twenty-fourth of March following, for agreeing with the owners of any convenient place as they may think suitable for removing the hospital to, in the harbor of Boston. This committee after being reminded of their duty on the twenty-fifth day of November, reported on the second of December, 1736, that they had performed their duty, and recommended, that the sum of five hundred and seventy pounds be granted and paid out of the public treasury to the Honorable John Jeffries, Esq., and the other select men of Boston, by them to be disposed of for the consideration purchase of a certain island in the harbor of Boston, called Ransford's Island, lying between Long Island and the main land near the town of Hull, to be improved as a Hospital for the Province. At the same time Mr Treasurer Foye was authorized to execute and pass a deed of sale to Richard Bill, Esq., of Boston, of all the right, title, and estate of the province in that part of Spectacle Island, with the buildings and appurtenances, where the hospital then was, on the receipt of the sum of one hundred and thirty pounds.

"On the thirteenth of December, 1737, the committee reported that they had built a hospital upon Rainsford Island; therefore, that upon Spectacle Island became of no use to the province, and was accordingly sold to Richard Bill, of Boston, and conveyed to him by deed dated seventeenth February, 1738-39."

[See Topographical and Historical Description of Boston, by N. B. Shurtleff, pp. 575-6.]

CHAP. 8.—"February 4, 1736-7. In the House of Represent^ves Voted That M^r. Speaker & M^r Cook with such as shall be Joined by the Hon^ble Board, be a Comm^tee to build a sutable and convenient House on Rainsfords Island lying between Long Island & the Main Land near the Town of Hull to be used & Improved as a publick Hospital for the Reception & Accomdation of such sick & infectious persons as shall be sent there by Order—

In Council: Read & Concur'd & William Dudley & Sam^l Welles Esq^rs are Joined in the Affair,—

Consented to, J. BELCHER."

[*Council Records, Vol. xvi., p.* 454.]

"October 18, 1737. In the House of Represent^ves Read & Ordered that the present Select men of the Town of Boston be and hereby are fully authorized and appointed a Committee to treat with some suitable person to keep the Hospital lately built by Order of this Court at Rainsford's Island, for the reception of the sick and infectious persons, and that the said person be desired and impowered to take all proper care of such Persons as shall be sent to the said Hospital, for twelve months next; And that the Committee agree with the Person for taking care of the sick &^c for his time and service therein for the year; And that they render an account of their doings in the premises with an accompt of the Issues and Profits which may arise by the produce of the Island the next season, to this Court, in the Fall Sessions of the next year.

In Council; Read and Concurr'd."

[*Ibid., Vol. xvii., b.* 1, *p.* 38.]

"June 21, 1738. In the House of Represent^ves Ordered that the Select Men of the Town of Boston be and hereby are fully authorized and impowered to agree with some suitable Person to keep the Hospital, lately built by Order of this Court at Rainsford Island for the reception of sick and infectious Persons; and that the said person be desired and impowered to take all proper care of such persons as may be sent to the said Hospital; and that the said Select Men be impowered to agree with the Person who may take care of the sick &^c. for his time and service therein, by the year.

In Council; Read and Concur'd.

Consented to J. BELCHER."

[*Ibid., p.* 244. See Shurtleff's Historical and Topographical Description of Boston, p. 524 and *seq.*]

From the foregoing it appears that a hospital was built on Rainsford's Island, in the year 1737, "to be used and improved as a public hospital for the reception and accommodation of such sick and infectious persons as shall be sent there by order." It continued until 1749, when the hospital and quarantine grounds were transferred to Deer Island and adjacent thereto. Dr. Shurtleff has the following sketch of this hospital in his Topographical and Historical Description of Boston, pp. 524,525:—

"A Report of a Committee of this Court lately appointed for building an Hospital or Ransford-Island, showing that they have built an House there of four Rooms on a floor, four upright Chambers and convenient Garrets, and Cellars well-finished and a Well, and suitable Conveniences for the Reception of the Sick, as Occasion may be, dated, Boston, tenth of October, 1737. . . . . The members from the town of Boston were empowered on the nineteenth of December, 1737, to prepare a bill for regulating the public hospital on Rainsford Island, which they presented on the twenty-first of the same month, being an act in addition to the one passed in 1701. This seems to have met with some opposition, as it was not finally passed until the twenty-first[1] of June, 1738. Since then various acts have been passed by the Provincial and State Legislatures on the subject of quarantine; so that Massachusetts may be now regarded as having the best laws on the subject, as well as the best regulated establishment in this country. Until the year 1852[2] when the State adopted a system of State Almshouses, Rainsford Island was used as a quarantine establishment; since then the city of Boston has been obliged to change its quarantine ground, and the new roads for this purpose are situated near Deer Island, the present residence of the Port Physician, the position having been selected at the time of the severe raging of the ship fever, in the summer of 1847.

In 1738-'39 the following act was passed: "An act for regulating the hospital on Rainsford's Island and further providing in case of sickness."

Whereas a good and convenient house hath lately been built, at the charge of the province, on the island called Rainsford Island, for the reception of such persons as shall be visited with any contagious sickness,—

Be it therefore enacted by His Excellency the Governour, Council and Representatives in General Court assembled, and by the authority of the same,

SECTION 1. That the commanding officer at Castle William (having orders therefor from the Captain-general or commander-in-ch[e]*i*[*e*]f), and the Keeper of the lighthouse, shall notify and direct the masters of all vessel(l)s coming near them, wherein an infectious sickness is or hath lately been, at their coming in, to come to anchor as near the before-mention(e)d house as may be, that the sick persons, and everything else on board said ship that may give infection, proper to [be] put into the same house, may be removed into it with the greater ease and safety.

SECT. 2. That upon application made by said master or commander, to two of his majesty's justices of the peace, and the selectmen of the town of Boston, the said justices and selectmen are hereby impowered to permit such passengers, goods or lading as they shall judge free from infection, to come on shoar, or be taken out and disposed of as the owners shall see meet; and such passengers and goods as shall not be permitted as aforesaid, shall remain on board, or be put into the said hospital.

SECT. 3. And if any master or immediate commander of any such vessel[l], for the time being, shall come on sho[a]r[*e*], or suffer any of his people or passengers to come on sho[a]r[*e*], or any boats to come on board, or suffer any goods to be taken out of his vessel[*l*], unless permitted as aforesaid, or shall come up with his vessel[l] until[l], by a certificate under the hands of two justices and the selectmen [*as*] aforesaid, it shall appear to the captain-general that the said vessel[l], company and goods are clear of infection, and the orders for stopping and detaining the same be removed and taken off, he shall, for every such offence, forfeit the sum of fifty pounds; and in case he be not able to pay that sum, he shall suffer six months' imprisonment. And if any sailors or passengers, coming in said vessel[l], shall, without the knowledge or consent of the master, presume to come on sho[a]r[*e*], or up above the said castle: or if any person, from town or country, presume to go on board such vessel[l] or go to the aforesaid house or hospital, in time of infection there, without leave from the authority aforesaid; or if any person, put sick into the said house, or sent there on suspicion of being infected, shall presume to go off the island without leave as aforesaid, every person offending in any of the above-mentioned particulars, shall forfeit the sum of ten pounds. And in case any person be not able to pay [*the*] said sum he shall suffer two months' imprisonm[en]t. All the above-mentioned fines to be sued for and recovered by the province treasurer for the time being; one-third of the fines to be to his majesty for the use of this governm[*en*]t, one-third to the informer, and one-third to the province treasurer for the time being.

SECT. 4. That when and so often as any ship or other vessel[l], wherein any infection or infectious sickness hath lately been, shall come to any port or harbour within this province, or when and so often as any person or persons belonging to, or that may, either by sea or land, come into any town or place near the publick hospital within this province, shall be visited, or who lately before may have been visited, with any infectious sickness, the justices and selectmen of such place be impowered immediately to order the said vessel[l] and sick persons to the province hospital or house aforesaid, there to be taken care of according to the direction of this act.

And when any such ship, vessel[l] or persons cannot, without any great inconvenience and damage, be ordered to the aforesaid house or hospital, in every such case the rules and directions are to be ob-

[1] Should read twenty-nine. See Province Laws, Vol. 2, Chap. 8, p. 944.

[2] This date is erroneous as respects quarantine. It ought to be 1849. See City Record, Vol. 27, pp. 385, 385.

served, which are already made in and by the act pass'd in the thirteenth year of the reign of his late majesty, King William the Third, intitled, "An Act providing in case of sickness."

SECT. 5. And the selectmen of Boston are directed and impowered to provide nurses, assistance and other necessaries for the comfort and rel[e]i[e]f of such sick persons sent to said hospital as aforesaid; the charge thereof to be born[e] by the said persons themselves, if able; or, if poor and indigent, then at the immediate charge of the province.

SECT. 6. This act to continue in force until[l] the end of the session of this court in May, *anno* one thousand seven hundred and forty-three, and no longer.

[*Passed June* 29; *published June* 30.]

In 1743–'44 the following additional section was passed:

"SECT. 5. That if any master, seaman or passenger belonging to any ship on board which any infection is or hath lately been, or is suspected to have lately been, or coming from any port where any infectious mortal distemper prevails, shall refuse to make answer upon oath to such questions as may be asked by the selectmen of the town to which such ship shall come, relating to such infection, such master, seaman or passenger shall forfeit the sum of fifty pounds; and in case he be not able to pay said sum, he shall suffer six months' imprisonment; all the abovementioned fines to be sued for and recovered by the province treasurer for the time being, one third of the fines to be to his majesty, for the use of this governm[en]t, one third to the informer, and one third to the province treasurer for the time being. And when any person shall be convicted of any offence against this act, and suffer the pains of imprisonment, and shall be unable to pay the costs of prosecution, such costs shall be allowed and paid out of the province treasury."

In 1749–'50 slight amendments were made to the act of 1743–'44.

In 1757 an act was passed which was a reënactment of the act of 1749–'50 with this difference, that there was no limitation.

In section 4 of the acts passed on the 12th August, 1750, and April 4, 1757, no penalty is affixed for their violation. In order to meet this requirement, the following act was passed, 1758:

AN ACT IN ADDITION TO AN ACT INTITLED, "*An Act for regulating the hospital on Rainsfords-island and further providing in case of sickness.*"

Whereas in and by an Act Intitled, "*An act for regulating the Hospital on* Rainsford's Island, *and further providing in Case of Sickness, it is provided, That when and so often as any Ship or other Vessel, wherein any Infection or infectious sickness hath lately been, shall come to any Port or Harbour within this Province, or when and so often as any Person or Persons, belonging to or that may either by Sea or Land, come into any Town or Place near the public Hospital within this Province shall be visited with any infectious Sickness; two of the Justices of the Peace or Select Men of such Place, be and are hereby impowered immediately to order the said vessel and sick Persons to the Province Hospital or House aforesaid to be taken Care of:*

But no Penalty is annexed to the Breach of the afore-recited Paragraph of said Act: Wherefore, BE IT ENACTED BY THE GOVERNOUR COUNCIL AND HOUSE OF REPRESENTATIVES, That when any Ship or other Vessel, wherein any infectious sickness is or hath lately been, shall come to any Port or Harbour in this Province, and either two Justices or the Select-Men of the Place shall order the said Vessel to the Province Hospital; and the Master or Mariners of such Vessel, shall refuse or delay by the Space of six Hours after said Order, given to said Master or either of the Owners of said Vessel, or of the Factors of either of said Owners, to come to fail, if Wind and Weather permit, in order to proceed to said Hospital, the Master of said Vessel shall forfeit and pay the sum of *One Hundred Pounds*, and suffer six Months Imprisonment: one half of said fine to be to the Informer or Prosecutor, and the other half to the Poor of the Town or District, to which such Port or Harbour belongs; the offender to be prosecuted in any Court of Justice proper to try the same.

[See Mass. Perpetual Laws, 1692–1760, Ed. of 1742, and Sup. State Library.]

During the period of the Revolution there was no act passed relating to quarantine. The hospital had suffered damage from the enemy. Accordingly, on June 12, 1780, the following resolve was adopted, appointing the Selectmen of Boston a committee to repair the same:

"*Whereas it has been represented by the Selectmen of the town of* Boston, *and made to appear to this Court, that the State hospital* on Rainsford's *Island has been much damaged by the enemy,* and stands *in need of immediate repair:* Therefore, *Resolved* That the selectmen of the town of *Boston* be, and they are hereby appointed a Committee to make (in the cheapest and most expeditious manner that may be) such repairs at said hospital as they shall judge necessary for the suitable accommodation of the sick, and lay their accounts before the Committee on accounts, for examination, and payment; and they are also impowered to take from Long-Island one or more of the barracks for the purpose of such repairs."

On June 22, 1797, the following act was passed, greatly increasing the power of the selectmen over quarantine.

CHAPTER XVI.

AN ACT TO PREVENT THE SPREADING OF CONTAGIOUS SICKNESS.

SECTION 1. *Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same,* That for the better preventing the spreading of infection when it shall happen that any person or persons coming from abroad, or belonging to any town or place within this State, shall be visited, or shall lately before have been visited with the plague, small-pox, pestilential or malignant fever, or other contagious sickness, the infection whereof may probably be communicated to others, the selectmen of the town where such person or persons may arrive, or be, are hereby empowered to take care and make effectual provision in the best way they can for the preservation of the inhabitants, by removing such sick or infected person or persons, and placing him or them in a separate house or houses, and by providing nurses, attendance, and other assistance and necessaries for them, which nurses, attendance and other assistance and necessaries, shall be at the charge of the parties themselves, their parents or masters (if able), or otherwise at the charge of the town or place whereto they belong; and in case such person or persons are not inhabitants of any town or place within this State, then at the charge of the Commonwealth.

SECT. 2. *And be it further enacted,* That any person or persons coming from any place out of the State, where the small pox or other malignant distemper is prevailing, into any town within this State, shall, when thereto required by the selectmen of such town, within the space of two hours from the time they shall be first informed of their duty by law in this particular, give notice to one or more of the selectmen, or the clerk of such town, of their coming there, and of the place from whence they came, upon pain of forfeiting, in case of neglect, the sum of *one hundred dollars.* And such person or persons, if not disabled by sickness, shall, within the space of two hours after warning given to him or them by the selectmen of such town for that purpose, depart from this State, in such manner and by such road, as the said selectmen shall direct; and in case of refusal, it shall be lawful for any Justice of the Peace in the County where such town may lie, by a warrant directed to a constable or other proper officer or other person whom the Justice shall judge proper, to cause such person or persons to be removed into the State from whence he or they may have come; and any person removed by warrant as aforesaid, who, during the prevalence of such distemper, shall presume to return into any town of this State, without liberty first obtained from such justice, shall forfeit and pay the sum of *four hundred dollars;* and any inhabitant of this State, who shall entertain in his house any person warned to depart as aforesaid, for the space of two hours after notice given him of such warning, by one or more of the selectmen aforesaid, shall forfeit or pay the sum of *two hundred dollars.*

SECT. 3. *And be it further enacted,* That it shall and may be lawful for the Selectmen of any town near to, or bordering upon, either of the neighboring States, to appoint by writing under their hands, some meet person or persons to attend at ferries or other places by or over which passengers may pass from such infected places; which person or persons so appointed, shall have power to examine such passengers as they may suspect to bring infection with them, and, if need be, to hinder and restrain them from traveling, until licensed thereto by a Justice of the Peace within such county, or by the selectmen of the town in which such person or persons may come; and any passenger, who coming from such infected place, shall (without license aforesaid) presume to travel within this State, unless it be to return by the most direct way to the State from whence he came, after he shall be cautioned to depart by the person or persons appointed as aforesaid, shall forfeit and pay the sum of *one hundred dollars;* the several forfeitures aforesaid to be recovered by action of debt in any Court of Record proper to try the same, one moiety to and for the use of the town where the offence shall be committed, the other moiety to the use of the person who may sue for the same.

SECT. 4. *And be it further enacted,* That if need be, any two Justices of the Peace may make out a warrant directed to the Sheriff of the County, or his deputy, or Constables of the town or place where any such sick person or persons may be, requiring them or any of them, in the name of the Commonwealth, with the advice and direction of the Selectmen of the same, to remove such infected person or persons, or to impress or take up convenient houses, lodgings, nurses, attendance and other necessaries, for the accommodation, safety and relief of the sick. And such Sheriff, his Deputy and Constable, are hereby authorized and required to execute such warrant accordingly.

SECT. 5. *And be it further enacted,* That whenever there shall be brought into any town within this State, either from any other town therein or from ports without the State, any baggage, cloathing, or goods of any kind whatsoever, and it shall be made to appear by the selectmen of the town to which such baggage, clothing or other goods shall be brought, or by the major part of such selectmen, to the satisfaction of any Justice of the Peace, that there is just cause to suspect baggage, clothing or other goods to be infected with the plague, small pox, pestilential fever or other malignant contagious distemper, it shall be lawful for such justice of the Peace, and he is hereby required in case, by warrant under his hand and seal, directed to the Sheriff, or his Deputy, or any Constable of the town in which such baggage, clothing, or other goods shall be, requiring him to

impress so many men as said Justice shall judge necessary to secure such baggage, clothing, or other goods, and said men to post as a guard and watch over the house or other place or places where such baggage, or clothing shall be lodged; which guard and watch are hereby required to take effectual care to prevent such baggage, clothing, or other goods being removed or intermeddled with, by any persons whatsoever, until due inquiry be made into the circumstances thereof, requiring likewise the said Sheriff, his deputy or the constable aforesaid, if it shall appear necessary, with the advice and direction of said Selectmen, to impress and take up convenient houses or stores, for the receiving, lodging and safe keeping of such baggage, clothing or other goods until the same shall be sufficiently cleansed from infection: And in case it shall appear highly probable to the said Justice, that such baggage, clothing, or other goods are infected as aforesaid, he is hereby empowered and directed to issue his warrant in manner as aforesaid, requiring said Sheriff, his deputy, or any Constable, or other person therein specially named, to remove said baggage, clothing, or other goods to some convenient place where there shall be the least danger of the infection spreading; there to remain, until the same shall be sufficiently aired and freed from infection in the opinion of said Selectmen; and the said Sheriff, Deputy Sheriff, or Constable in the execution of said warrants are empowered and directed, if need be, to break up any house, warehouse, shop or other place, particularly mentioned in said warrant, where such baggage, clothing, or other goods shall be; and in case of opposition, to require such aid as shall be necessary to effect the execution of said warrants, and repel such opposition; and all persons are hereby required at the commandment of either of the said officers, having either of the warrants aforesaid, under penalty of *ten dollars*, to be recovered before any Justice of the Peace in the County where such opposition may happen, to assist such officer in the execution of the same warrant, against any opposition as aforesaid; and the charges of securing such baggage, clothing, or other goods, and of airing or transporting the same, shall be borne and paid by the owners thereof, at such rates and prices as shall be appointed by the Selectmen of the town where such baggage, clothing, or other goods shall be, to be recovered by action of debt, by any person or persons who may have been employed in the business aforesaid, in any Court of Record to try the same.

SECT. 6. *And be it further enacted*, That inquiry shall be made by the officer or other person on duty at the castle in the harbour of *Boston*, of every vessel coming from sea, and passing by the said castle, whether any infectious sickness be on board, or has been on board, since such vessel left the port from whence she last came; and if any such vessel has any sickness on board, or has had any on board, since her leaving such port, in such case, order shall be given by said officer, or other person on duty, to the master or commander of such vessel, immediately to anchor, and to remain at anchor until a certificate shall be obtained from the major part of the selectmen of the town of *Boston*, that they are of opinion such vessel may come up to the town without danger to the inhabitants, or until the said Master or commander shall receive orders from the said Selectmen to anchor his vessel near the Hospital on *Rainsford's Island*, in the harbour of *Boston*. And in case any master or commander of a vessel shall by himself or the people on board, make false answer, when enquired of as aforesaid, by the officer or other person on duty as aforesaid, or after orders are given as aforesaid, shall neglect or or refuse to anchor near the Castle as aforesaid, or come on shore, or suffer any passenger or other person belonging to the vessel to come on shore, or any goods to be taken out before the vessel shall have anchored, or without liberty from the Selectmen as aforesaid; or in case any master or commander of a vessel ordered to anchor near the Hospital as aforesaid, shall neglect or refuse so to do; in every such case, every master or commander so offending, shall forfeit and pay for each offence the sum of *four hundred dollars*, or suffer six months imprisonment.

SECT. 7. *And be it further enacted*, That upon application made to the selectmen of the town of *Boston* by any master or commander of any vessel at anchor near the Hospital as aforesaid, the said selectmen are hereby empowered to permit such passengers, goods, or lading, as they shall judge free from infection to come on shore; or to be taken out and disposed of as the owners shall see fit; and such passengers and goods as shall not be permitted as aforesaid, shall remain on board or be landed on said Island; and if any master or commander of any such vessel, for the time being, shall come on shore, or suffer any of his people or passengers to come on shore, or any boat to come on board, or suffer any goods to be taken out of his vessel, unless permitted as aforesaid, or shall come up to said town, with his vessel, until by a certificate under the hands of said selectmen, or the major part of them, it shall appear that said vessel, company and goods are clear of infection, and the orders for stopping the same be removed or taken off, he shall for every such offence forfeit the sum of *two hundred dollars;* and in case he be not able to pay that sum he shall suffer three months imprisonment; and if any sailors or passengers, coming in said vessel, shall without the knowledge or consent of the master or commander, presume to come on shore, or up above the castle aforesaid, or if any person shall knowingly presume to go on board from shore, or go to the aforesaid House or Island in time of infection there, without leave as aforesaid; or if any person put sick into the said house or sent there on suspicion of being infected shall presume to go off the said Island without leave as aforesaid, any person offending in any of the particulars above mentioned shall forfeit the sum of *two hundred dollars;* and in case such person be not able to pay such forfeiture, he shall suffer two months' imprisonment. All prosecutions for offences contrary to this and the preceding section, shall be by indictment or information in the Supreme Judicial Court or Court of General Sessions of the Peace; and one moiety of all fines mentioned in said sections shall be to the use of the town of *Boston*, and the other moiety to the use of the selectmen of said town for the time being, whose particular duty it is hereby made to prosecute therefor.

SECT. 8. *And be it further enacted*, That whenever any ship or vessel, wherein any infection or infectious sickness hath lately been, shall come to any harbour within this State; or whenever any person or persons belonging to, or that may either by sea or land come into any town or place near the public Hospital aforesaid, shall be visited, or shall lately before have been visited with any infectious sickness, two of the Justices of the Peace or Selectmen of such place be, and hereby are empowered immediately to order the said vessel and sick persons to the said Hospital there to be taken care of according to the directions of this Act: And where any such ship, vessel or persons cannot without great inconvenience and damage be ordered to the aforesaid Hospital, in any such case the rules and directions are to be observed which are provided in the first enacting clause of this Act: And in case the master or mariners of any vessel ordered to the Hospital as aforesaid, shall refuse or delay for the space of six hours after such order being given, to said master or either of the owners of said vessel, or of the factors, or either of said owners of the goods, to come to sail, if wind and weather permit, in order to proceed to said Hospital, such master so refusing shall forfeit and pay the sum of *four hundred dollars;* and each mariner so refusing, the sum of *one hundred dollars;* and in case they be not able to pay said sums, they shall suffer six months' imprisonment; one half of said fine to be to the informer, and the other half to the poor of the town or district, to which such port or harbour belongs, and to be recovered in any Court of Record proper to try the same by indictment or information.

SECT. 9. *And be it further enacted*, That if any master, seaman or passenger, belonging to any vessel on board which any infection is, or may have lately been, or suspected to have been, or which may have come from any port where any infectious mortal distemper prevails, shall refuse to make answer on oath to such questions as may be asked him or them relating to such infection by the Selectmen of the town to which such vessel may come (which oath the Selectmen are hereby empowered to administer), such master, seaman or passenger, so refusing, shall forfeit the sum of *two hundred dollars;* and in case he be not able to pay said sum, he shall suffer six months' imprisonment; said penalty to be adjudged on prosecution by indictment on information in any Court proper to try the same, one moiety of said fine to the use of the town where the offence may be committed, and the other moiety to the use of the Selectmen thereof, whose particular duty it is hereby made to prosecute therefor. And the Selectmen of *Boston* are heraby authorized and directed to provide nurses, assistants, and necessaries, for the comfort and relief of such sick persons as may be sent to said Hospital as aforesaid: The charge thereof to be borne by the said persons themselves, if able, or, if poor and unable, by the towns to which the respectively belong, or, if not inhabitants of any particular town, or other place within this State, then by the Commonwealth.

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SECT. 12. *And be it further enacted*, That whenever vessels shall arrive at any port other than *Boston* within this Commonwealth, having on board any person visited with the plague, small pox, malignant fever, or any other pestilential disease, the master, commander, or pilot therof shall not bring such vessel up near the town of the port where she first arrives, until liberty be first granted in writing by the Selectmen thereof; but they may bring such vessel to an anchor in such place below the town, as will be most for the safety of the inhabitants thereof and the preservation of the vessel and the people on board, there to wait for orders from the Selectmen of the town before any passenger or person belonging to, or any thing on board the same be brought on shore; and any master or commander of such vessel who shall be found guilty of a breach of the Law contained in this section, shall forfeit and pay a fine of *two hundred dollars* for every such offence, upon conviction thereof before any Court proper to try the same; and any Pilot who may go on board any such vessel, and pilot the same up to the town without liberty first had and obtained from the Selectmen thereof as aforesaid, shall upon conviction, in manner as aforesaid, forfeit and pay a fine of *fifty dollars* for every such offence; all which fines contained in this section may be sued for and recovered with costs of suit in manner as aforesaid by the Selectmen of the town where the offence is committed, to and for the use of the same town.

On June 20, 1799, an act was passed which transferred the power over quarantine to the Board of Health.

* * * * * * *

The first act establishing a board of health in the town of Boston was passed on the 13th February, 1799. This act impowered the board to examine into all nuisances, or if they suspected any cause of disease, could all, or any two of them, with a justice of peace and

sheriff, examine cellars, vessels, &c. It conferred, however, no power on the board to regulate the quarantine of Boston.

On April 17, 1799, a physician (Dr. Welsh) was appointed to act under the direction of the board, his visiting fee not to exceed four dollars. It appears by his warrant, that his duties were, "to examine all such vessels as shall arrive in the Harbour and be detained at the Castle for this purpose,"—"passengers & seamen with their cloaths and Bedding,"—"to give certificate to the Captain" if found free from infection; also, "to certify to the Commanding officer of the Garrison in like manner." If he found any infectious sickness he was "immediately to inform the Board" as well as to "order the vessel to Rainsford Island to land the sick, and have the vessel sufficiently cleansed before coming up to town."

The board next informed the commanding officer of Castle William of Dr. Thomas Welsh's appointment and duties, praying he would assist to carry out the same, and he advised from time to time of such ports as they considered infectious.

In the mean time a vessel arrived from New York having a quantity of feathers on board supposed to be infectious. To prevent this recurrence they solicited the aid of the collector of the port of Boston which would serve to double lock the harbor and prevent any vessel with infection from entering the town. The reply of the collector can be gathered from the minutes of the board, May 15, as follows:—

"That the Collector agreed, that in future no vessells should be admitted to an entry from the West Indies until this Board were satisfied, that the Cargo might be landed without danger to the Inhabitants; and inasmuch as the Coasters took out a general permit the Collector would give special Orders to Inspectors charged with the Coasting Business, not in future to suffer any Feathers, or other suspected goods to be landed until this Board were satisfied that they are free from Infection. The collector further observed the necessity of this Board notifying him on this subject in writing."

It has already been stated that the first act establishing a board of health in the town of Boston gave them no powers over its quarantine.

At a meeting of the board of health held on May 22, 1799, the following vote was passed, showing the necessity felt for the transfer to them of the quarantine power exercised by the Selectmen:

"*Voted*, That Paul Revere, Esq., be a Committee to confer with the Town's Committee, the Representatives of the Town to the General Court of this Commonwealth, or to the Attorney General on the Expediency of altering and amending the Law Entitled, An Act to Empower the Inhabitants of the Town of Boston for choosing a Board of Health, and for removing & preventing Nuisances."

* * * * * * *

SECT. 16. *And be it further enacted*, That all the powers and duties which are given to, and required of the Selectmen of the town of *Boston*, by a certain law of this Commonwealth, passed the twenty-second day of *June*, one thousand seven hundred and ninety-seven, entitled "An act to prevent the spreading of contagious sickness," shall be, and they are hereby transferred to, and made the duty of the Board of Health of the town of *Boston*, anything in said law to the contrary notwithstanding.

SECT. 17. *And be it further enacted*, That the Board of Health, for the town of *Boston*, shall, and they hereby are empowered from time to time, to choose a suitable and discreet person, who has been approved of by some Medical Society within this Commonwealth, to act as a visiting Physician to said Board, whose duty it shall be, to visit all vessels coming from any place or places, in which the said Board shall think that any contagious sickness prevails, and such Physician shall be under the directions of said Board, and may be removed by them whenever they shall see cause.

* * * * * * *

An additional act was passed June 20, 1816, entitled: "An act to empower the town of Boston to choose a board of health and to prescribe their power and duty." It recites the time of choosing members, the powers of the clerk, powers of the president, regulations and powers of the board, and provides for its supervision over quarantine.

* * * * * *

SECT. 6. *Be it further enacted*, That the said Board of Health, shall have power to establish and regulate the quarantine to be performed by all vessels arriving within the harbor of Boston, and for that purpose shall have power from time to time to establish, make and ordain all such orders, rules, and regulations relating to said quarantine, as said Board shall think necessary for the safety of the public and the security of the health of the inhabitants of the said town of Boston;

* * * * * * *

It appears from this review that the early jurisdiction over quarantine was exercised by the governor and council of the Colony of Massachusetts Bay. Later it was carried out by the same, with the assistance of the selectmen of the town of Boston. These selectmen had the full powers over quarantine conferred on them by an act passed in the year 1797. By the appointment of a board of health in 1799, all the powers of the selectmen over quarantine were delegated to this board by an act passed 20th June, 1799, and continued until the board ceased to exist.

By the seventeenth section of the act of 1821, establishing the City of Boston, all the power and authority by law invested in the Board of Health for the town of Boston, at the time of the passage of the said act, relative to the quarantine of vessels, and relative to every other subject whatsoever, was transferred to and vested in the City Council, to be carried into execution by the appointment of Health Commissioners, or in such other manner as the health, cleanliness, comfort and order of the said city might in their judgment require, subject to such alterations as the legislature might from time to time adopt. (See City Ordinances, 1856, page 242.)

By a resolve of the legislature passed February 4, 1832, the governor was authorized to appoint three commissioners to revise the General Statutes of this Commonwealth. This body of laws compiled by the commissioners, and known as the Revised Statutes of the Commonwealth of Massachusetts, was passed November 4, 1835. Another act was passed on the same date, repealing all previous statutes therein revised and consolidated.

In the Revised Statutes, the act on the subject of quarantine can be found in Chapter 21, commencing with section 27. In substance, this act is the same as that passed in the year 1816.

Gallop's Island was purchased by the city of Boston in 1866. The War Department had erected on it a number of buildings, which were occupied by United States troops. The civil war had ended, the United States authorities had no further use for the buildings, and in view of the approach of cholera these buildings would be highly serviceable to the city. Negotiations were entered into, and the sum of five thousand dollars appropriated for the purchase of the buildings and furniture.

The location of quarantine had been changed from Rainsford Island (Nantasket Road), into the road at Deer Island, in the year 1849. The first officer acting under the title of port physician was chosen August 20, 1850, by concurrent vote of both branches of the city council.

The present quarantine ground is, as has before been stated, near Deer Island. In view of the possibility of the occurrence of malignant cholera, the city, in the spring of 1866, purchased the buildings erected on Gallop's Island, the United States Government no longer requiring them for military purposes, and passed an ordinance on the first day of June, 1866, extending the quarantine grounds so as to include Gallop's Island.

The quarantine hospital, as established on Deer Island in 1849, remained there until April, 1867. At this time small-pox was prevailing in the city to a considerable extent, and the greater number of cases requiring to be removed were sent down to quarantine hospital. The accommodations at Deer Island soon became inadequate, and in April of that year, for the purpose of providing larger hospitals and the better isolation of contagious diseases in quarantine, several buildings on Gallop's Island were temporarily fitted up, and the patients in the old hospital at Deer Island removed thereto. The Deer Island hospital was then abandoned. From time to time the old buildings at Gallop's Island were enlarged and improved, as the demand for their use increased, until during the epidemic of small-pox in the winter of 1872–73, when at one time they contained over one hundred patients.

During the epidemic referred to the present board of health was created and given all the authority before vested in the mayor and aldermen or city council as a board of health.

This board at once established an inland hospital for small-pox, since which no cases have been sent from the city to quarantine. All the old buildings on the island have since been removed and new ones have taken their places. There are two commodious hospitals, one for small-pox and the other for fever patients. These, with an ample supply of hospital tents now on hand, are sufficient for any emergency likely to arise.

The island has been greatly improved in the last few years, and provided with suitable buildings and appurtenances of every kind for the keeper, and for the proper maintenance of a quarantine establishment. The boarding station is still at Deer Island, where it has been since 1849. It is provided with a steam propeller for the use of the port physician and his assistant in boarding vessels and transferring the sick from vessels to the quarantine hospitals.

PRESENT STATUTES CONCERNING QUARANTINE IN THE STATE OF MASSACHUSETTS.

32. A town may establish a quarantine ground in a suitable place either within or without its own limits; but if such place is without its limits, the assent of the town within whose limits it may be established shall be first obtained.

33. Two or more towns may at their joint expense establish a quarantine ground for their common use, in any suitable place either within or without their own limits; but if such place is without their limits, they shall first obtain the assent of the town within whose limits it may be.

34. The board of health in each seaport town may from time to time establish the quarantine to be performed by vessels arriving within its harbor; and may make such quarantine regulations as it judges necessary for the health and safety of the inhabitants.

Whenever quarantine is imposed on any vessel coming from abroad, and the owner, consignee, master, or other person interested in such vessel or her cargo, shall be interrogated by any member of the board of health in his official capacity, or by the visiting physician

of said board, respecting any circumstance or event touching the health of the crew or passengers on such vessel, or any infection suspected in the cargo, from the time of her first engaging on the voyage she may then be terminating, and the said owner, consignee, master, or other person interested as aforesaid, shall make any false or unfounded declaration respecting the points under examination, every such owner, consignee, master, or other interested person, upon conviction thereof, in manner as pointed out in the eighth section of the law to which this is an addition, shall forfeit and pay a fine not exceeding five hundred dollars, suffer the six months' imprisonment, either or both, at the discretion of the court having cognizance of such offence.

35. Such regulations shall extend to all persons, goods, and effects arriving in such vessels, and to all persons who may visit or go on board of the same.

36. Whoever violates any such regulation, after notice thereof has been given in the manner before provided in this chapter, shall forfeit a sum not less than five nor more than five hundred dollars.

37. The board in each seaport town may at all times cause a vessel arriving in such port, when such vessel or the cargo thereof is in his opinion foul or infected, so as to endanger the public health, to be removed to the quarantine ground, and thoroughly purified at the expense of the owners, consignees, or persons in possession of the same; and may cause all persons arriving in or going on board of such vessel, or handling the cargo, to be removed to any hospital under the care of the board, there to remain under their orders.

38. If a master, seaman, or passenger belonging to a vessel on board of which any infection then is or has lately been, or is suspected to have been, or which has been at, or has come from, a port where infectious distemper prevails that may endanger the public health, refuses to make answer on oath to such questions as may be asked him relating to such infection or distemper by the board of health of the town to which such vessel may come (which oath any member of the board may administer), such master, seaman, or passenger shall forfeit a sum not exceeding two hundred dollars; and if not able to pay said sum, he shall suffer six months' imprisonment.

39. All expenses incurred on account of any person, vessel, or goods, under quarantine regulations, shall be paid by such persons, or the owner of such vessel or goods respectively.

THE PRESENT ORDINANCES RELATING TO QUARANTINE AT BOSTON.

SECT. 23. The quarantine grounds of the city of Boston shall consist of Deer Island and Gallop's Island, in Boston Harbor; and said islands are hereby made and declared to be the places of quarantine for the port of Boston.

SECT. 24. The said board of health shall annually, in the month of April, appoint, subject to the approval of the mayor, a suitable person for port physician, who shall hold his office for one year from the first Monday in May in the year in which he is appointed, unless sooner removed; and he may be removed at the pleasure of the board, and a vacancy may be filled at any time for the unexpired term. He shall perform such duties in addition to those hereinafter designated, keep such records, and make such reports, as the board of health may from time to time direct. For his services he shall receive such compensation as the city council may from time to time determine.

SECT. 25. The port physician shall reside at Deer Island. He shall be superintendent and physician of the quarantine establishment at Deer Island, and either physician or assistant physician, as the board of directors for public institutions may elect, of all the city establishments which are, or may be, located upon said island. He shall also perform all such services as may be required of him by the mayor, or the board of health, in relation to quarantine.

SECT. 26. The port physician may, at any time, with the concurrence of the board of health, appoint an assistant port physician, to hold his office so long as the board of health shall determine; and such port physician shall receive such compensation for his services as may be appropriated therefor by the city council.

ABSTRACTS FROM CONSULAR REPORTS.

BORDEAUX, FRANCE.—United States Consul B. Gerrish reports for the month of April the following mortality: From small-pox, 11; typhoid fever, 6; other contagious diseases, 28; apoplexy, 29; consumption, 67; acute lung diseases, 23; croup, 11. There were 378 deaths from all causes; annual death rate, 21.4 per 1,000, the population being estimated at 215,140.

CONSTANTINOPLE.—United States Consul G. H. Heap forwards copies of telegrams from which the following extracts are made:

1. The sanitary council of Egypt, at a meeting on April 5, passed the following resolutions:

The council, considering that Syria is not infected by the plague and that vigorous measures have been used for its restriction on the frontier by the Ottoman Government, decides to modify the prohibitions heretofore issued with regard to importations from Syria as follows:

a. Passengers from Syrian ports in ships with clean bills of health will be admitted to free pratique in Egypt after a strict medical inspection and disinfection of their baggage within 24 hours after arrival.

b. Merchandise not susceptible of retaining infection may be landed in Egypt, comprising manufactured goods in bales, excepting carpets and shawls. The coverings of such packages will be aired and disinfected. But all goods coming from Syria, with a certificate from the proper authorities that the goods are not from an infected region, will be admitted without inspection into Egypt, except paper stock, rags, and cast-off clothing.

c. Any vessel which has retained on board articles susceptible of infection will not be admitted to pratique, and a note to that effect will be made on her papers.

The loading, unloading, and transshipping of goods shall be done in quarantine, and those engaged in these operations shall be subjected to the prescribed measures of disinfection.

2. Dr. Obermayer reports that the following damage has been done by the earthquakes of April 22 and 30 on the coast of Asia Minor, opposite to the island of Chios. Seven villages, containing a total of 31,455 inhabitants, had 47 killed and 117 wounded; houses destroyed, 2,663; houses damaged, 2,706.

3. *April* 26.—Dr. Zitterer reports two more villages burnt and the people put into camps. He gives details of operations at several points, and states that medical inspectors have been notified to send no reports of the plague from any other source of information than their personal inspection. At Nedjeff 54 deaths were reported for April 20 and 76 for April 21. At Djarna, 23 deaths April 18; April 20, deaths 21, and April 21, deaths 19. Telegrams of April 27 indicate no abatement of the epidemic.

RIO DE JANEIRO.—United States Consul T. Adamson forwards with his report of mortality for the week ending April 2, a record of meteorological observations for the first three months of this year. Yellow fever is steadily decreasing, and only 6 deaths are reported for the week. Out of a total of 204 deaths, consumption gives 24, or about 12 per cent., which is less than the mean rate for the United States.

SAINT JOHN'S, NEWFOUNDLAND.—Under date of May 18, United States Consul T. N. Molloy states that the Government of Newfoundland, having been informed that fever and small-pox exist at New York and other ports of the United States, has ordered that all vessels from those ports, under 14 days of passage, shall be subjected to quarantine until examined by the proper authorities of the port of Saint John's.

SMYRNA.—From this port, United States Consul B. O. Duncan writes, under date of April 21, that the caravans from Nedjeff to Damascus and Aleppo are much more likely to carry the plague into Asia Minor than any communication by sea. No decrease of the pest is hoped for until the heat of summer, about the end of May, a high temperature being regarded as unfavorable to the spread of the disease. The items of news, to the date of this letter, have been already given in the dispatches from Constantinople.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BROWNSVILLE, TEX.—Dr. J. M. Main, under date of May 10, forwards report of deaths for April, 1881. Among the causes noted are: Consumption 4, small-pox 4, old age 1. Total deaths, 9; population, 5,800; annual death-rate 18.8 per 1,000.

NEW ORLEANS, LA.—At the regular meeting of the New Orleans Medical and Surgical Association, held May 7, a committee of six members was appointed to prepare a resolution to be addressed to the National Board of Health and to the Louisiana State board of health which, when submitted, was unanimously adopted, as follows:

Resolved, That the special attention of the National Board of Health be called to the unusual prevalence at the present time of typhus fever, scarlet fever, small-pox, and other contagious diseases in the Northern and in some of the Western States. We, therefore, urge the necessity of immediate action, the most rigid railroad inspection from such places, believing, as we do, that they may be considered *dangerously infected*.

J. P. DAVIDSON, M. D.,
D. C. HOLLIDAY, M. D.,
M. LEVY, M. D.,
J. L. CRAWCOUR, M. D.,
G. K. PRATT, M. D.,
D. JAMESON, M. D.,
Committee.

M. LEVY, M. D., *Secretary.*

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean of thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	May 9	1	11.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52
Canada	Kingston	15,000	May 14	7	24.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61.5
Bermuda	Hamilton	14,867	May 17	3	10.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
Cuba	Havana	195,437	May 7	132	35.2	.....	.....	.....	.....	.....	24	.....	11	.....	.....	.....	.....	79
Hayti	Aux Cayes	9,000	Apr. 23	4	23.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	....do	9,000	Apr. 30	5	29.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
Do	Port-au-Prince	30,000	Apr. 27	17	29.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
Do	....do	30,000	May 4	7	12.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
Mexico	Matamoras	16,000	May 7	12	39.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brazil	Rio de Janeiro	330,000	Apr. 9	168	26.6	.....	.....	.....	6	.....	1	.....	3	.....	.....	.....	3	.....
Do	....do	330,000	Apr. 16	197	31.1	.....	.....	.....	5	.....	.....	.....	4	.....	1	.....	10	.....
Do	....do	330,000	Apr. 23	206	32.6	.....	.....	.....	6	.....	2	.....	4	.....	.....	.....	6	.....
Azores	Fayal	7,630	Mar. 26	5	34.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
Do	....do	7,630	Apr. 2	11	75.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
St. Helena	Jamestown	6,240	Apr. 2	4	33.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81.0
Do	....do	6,240	Apr. 9	3	25.1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	81.3
Do	....do	6,240	Apr. 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82.0
Grand Canaries	Las Palmas	18,000	Apr. 9	8	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	....do	18,000	Apr. 16	13	37.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Ireland	Queenstown	10,000	May 7	3	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scotland	Dundee	141,900	Apr. 30	65	23.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	49.0
Do	Leith	59,958	May 7	20	17.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	45.3
England	London	3,707,130	Apr. 30	1,550	21.8	.....	.....	.....	.....	.....	70	.....	8	.....	2	.....	133	49.9
Do	Bradford	197,196	Apr. 30	76	21.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do	Tunstall	29,673	May 7	10	17.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	54.1
Do	Liverpool	549,843	May 7	233	22.1	.....	.....	.....	.....	3	.....	6	4	28	6	16	20	49.6
Do	Sheffield	284,403	May 7	120	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.4
Wales	Cardiff	83,389	May 7	29	18.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	51.8
France	Paris	1,988,806	May 7	1,137	29.7	.....	.....	.....	.....	.....	21	.....	40	.....	.....	.....	102	.....
Do	Lyons	342,815	Apr. 23	184	28.0	.....	.....	.....	.....	.....	11	.....	1	.....	.....	.....	9	.....
Do	Havre	92,068	Apr. 30	71	40.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.1
Do	Rouen	104,209	May 7	57	28.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Switzerland	Geneva	68,718	Apr. 23	29	22.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.2
Do	....do	68,718	Apr. 30	30	22.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	46
Do	Zurich	25,329	Apr. 30	14	29.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holland	Rotterdam	152,515	May 7	69	23.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	1	.....
Do	Amsterdam	316,952	Apr. 30	177	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	48
Germany	Breslau	273,000	Apr. 23	172	32.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	44.6
Do	Brunswick	75,000	Apr. 30	40	27.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	44.5
Do	Bremen	112,200	Apr. 23	53	24.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Do	Barmen	95,000	Apr. 30	37	22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.5
Do	Cologne	144,750	Apr. 30	89	31.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	.....
Do	Frankfort	137,000	Apr. 30	75	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	46.3
Do	Hamburg	400,000	Apr. 16	231	30.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	6	.....
Do	Mannheim	50,500	May 7	25	25.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.6
Bavaria	Munich	230,000	Apr. 30	195	44.2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	19	.....
Saxony	Chemnitz	95,135	Apr. 23	71	38.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	45
Do	Dresden	220,216	Apr. 23	104	24.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	9	43.1
Do	....do	220,216	Apr. 30	97	23.0	.....	.....	.....	.....	.....	.....	.....	.....	1	1	12	12	42.9
Do	Leipsic	151,616	Apr. 30	68	23.4	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	4	43.5
Belgium	Brussels	401,745	Apr. 30	187	24.2	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	.....	48.5
Do	Antwerp	173,643	Apr. 23	108	32.4	.....	.....	.....	.....	13	1	12	1	.....	.....	.....	.....	.....
Do	....do	173,643	Apr. 30	71	21.3	.....	.....	.....	.....	13	2	13	.....	.....	.....	.....	1	.....
Italy	Genoa	185,000	Apr. 30	87	24.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.4
Do	....do	185,000	May 7	82	23.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64.4
Austria	Vienna	730,911	Apr. 30	505	30.8	.....	.....	.....	.....	.....	22	.....	1	.....	.....	.....	21	.....
Roumania	Bucharest	177,646	Apr. 23	108	31.7	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	8	.....
Do	....do	177,646	Apr. 30	86	25.4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6	.....
Hungary	Buda-Pesth	370,037	Apr. 23	285	40.2	.....	.....	.....	.....	.....	9	.....	.....	.....	14	.....	1	.....
Russian Poland	Warsaw	379,763	Apr. 23	157	21.6	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	49.8
Sweden	Stockholm	173,433	Apr. 23	80	25.5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	33.6
Spain	Malaga	115,882	Apr. 23	79	35.6	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	69
Do	....do	115,882	Apr. 30	84	37.8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	70
Do	Cadiz	65,028	Apr. 9	27	21.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.2
Do	....do	65,028	Apr. 23	24	19.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62.7
Do	Seville	138,000	Apr. 24	74	28.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71 6
Do	....do	138,000	May 1	52	19.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	18	73.4
Barbary	Tripoli	20,000	Apr. 30	8	20.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71.2
Cape Colony	Cape Town	35,000	Apr. 18	20	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
Egypt	Alexandria	220,000	Apr. 30	161	38.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British India	Calcutta	429,535	Apr. 2	284	34.4	.....	53	.....	.....	.....	21	.....	20	.....	.....	.....	.....	79.0

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 14, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	16	24.7	33,480	330	16		24.9				5								3			
	Bangor	16,857	9	27.8																	1			
N. H...	Concord	13,838	6	22.6	13,771	67	6		22.6				2								1			
Vt	Burlington	11,364	1	4.6	11,248	116	1		4.7															
Mass ..	Boston	362,535	170	24.5	356,535	6,000	166	4	24.5	34.8			48	3			5				33	2	2	
	Cambridge	52,740	16	17.7	51,222	1,518	18		18.3				5								3			
	Edgartown	1,301	1	40.1	1,238	63	1		42.1															
	New Bedford	26,875	13	25.2	25,349	1,526	13		26.7				4						1		1			
	Newburyport	13,537	3	11.6	13,469	68	3		11.7															
	Marblehead	7,467	4	28.0	7,456	11	4		28.0												1			
	Nantucket	3,726	5	69.1	3,657	69	5		71.0										1					
	Plymouth	7,094			6,930	164																		
	Fall River	49,006	16	17.0	48,846	160	16		17.2				6				2				3		2	
	Lowell	59,485	27	23.7	59,307	178	27		23.8				13								5			
	Lawrence	39,178	11	14.7	39,026	152	11		14.9				4				1		1		1			
	Pittsfield	13,367	4	15.6	13,047	320	4		16.0								1							
	Worcester	58,295	22	19.7	57,528	767	22		20.0				14						3		2			
	Lynn	38,284	14	19.1	37,730	554	14		19.3				2								7			
	Brockton	13,608	4	15.3	13,569	39	4		15.4				1								1			
	Holyoke	21,851	11	26.3	21,822	29	11		26.3				3				1		2		1		1	
	Bridgewater	3,620	2	28.9	3,594	26	2		29.0												2			
	Milford	9,310	3	16.8	9,267	43	3		16.8				1								1			
	Chicopee	11,325	2	9.2	11,324	1	2		9.2								1							
	Fitchburgh	12,405	6	25.2	12,368	37	6		25.2				2						1					
	Somerville	24,985	1	2.1	24,906	79	1		2.2															
	Springfield	33,340	17	26.6	32,592	748	17		27.2				6				1		1		4			
	Spencer	7,466	5	34.9	7,459	7	5		34.9				3				1				1		1	
	Quincy	10,529	2	9.9	10,438	91	2		10.0												1			
	Northampton	12,172			12,044	128																		
	Haverhill	18,475	5	14.1	18,306	169	5		14.3												2			
	Gloucester	19,329	3	8.2	19,309	20	3		8.2				2											
	Chelsea	21,785	6	14.2	21,253	532	6		14.7				3								1			
	Clinton	8,030	1	6.5	8,019	11	1		6.5				1											
	Beverly	8,445	2	12.6	8,421	24	2		12.6												1			
	Attleborough	11,111	5	23.5	10,975	136	5		23.8												2			
	Malden	12,017	8	35.8	11,959	58	8		35.9				1											
	Salem	27,598	16	30.2	27,396	202	16		30.5				4				1				4			
	Taunton	21,213	10	24.3	21,102	111	10		24.7												4			
	Westboro'	5,214	4	39.9	5,178	36	4		40.0				2											
	Woburn	10,938	4	19.1	10,907	31	4		19.1				1								1			
	Weymouth	10,571	8	39.6	10,521	50	8		39.6				1								2			
	Waltham	11,711	2	8.9	11,692	19	2		8.9				1											
	Webster	5,666	1	9.2	5,652	44	1		9.2				1											
	Westfield	7,587	1	6.8	7,527	62	1		6.8				1											
	Brookline	8,053	5	32.4	8,036	17	5		32.4				3											
	Newton	16,995	5	15.1	16,780	215	5		15.5				2											
R. I....	Providence	104,855	49	24.4	101,209	3,646	48	1	24.8	13.7			13				1				7			
Conn.	New Haven	62,882	27	22.4	60,654	2,228	26	1	22.4	23.0			5				2				2			
	Waterbury	20,269	5	12.9	20,117	152	5		13.0								1							
	Fairfield	3,748			3,603	145																		
	Norwich	21,141	9	21.9	20,579	562	9		22.8				1				1				1			
N. Y...	New York	1,206,577	822	35.5	1,186,144	20,433	803	19	35.3	48.5			350				31		22		89		19	
	Brooklyn	566,689	282	26.0	558,474	8,215	277	5	25.9	31.8			112	2			15				35	1	5	1
	Yonkers	18,892	13	35.9	18,528	364	8		22.6				3								1			
	Poughkeepsie	20,207	7	1.1	19,513	694	7		19.2				1								1			
	Newburgh	18,050	7	20.3	17,480	570	7		20.9				1						1		1			
	Rochester	89,363	36	21.0	88,845	518	36		21.1				12				1		5		4			
	Buffalo	155,137	57	21.7	154,292	845	57		19.3				20				4		1		7		1	
	Watertown	10,666	3	14.6									1											
	Binghamton	17,315	4	12.0	16,921	394	4		12.1				2				1							
	Cambridge	1,850	1	29.1	1,800	50	1		29.2															
	Seneca Falls	5,880	3	26.1	5,839	41	3		26.2				3						1					
	Utica	33,913	7	10.8	33,669	244	7		10.9				1						1					
	Tarrytown	8,874	2	11.8			1	1																
	Little Falls	6,910	3	22.6	6,836	74	3		22.8															
N. J ...	Hudson Co.	187,950	82	22.8	186,254	1,696							24				7				7			
	Newark	136,400	66	25.2	133,074	3,326	64	2	25.3	31.4			23				1		1		11			
	Orange	13,206	4	15.8	12,749	459	4		16.4				3								1			
	Camden	41,658	22	27.5	38,064	3,594	19	3	26.0	43.2			8	1			1				1	1		
	Plainfield	8,126	5	32.6	7,633	493	4	1	27.3	105.0			3				1			1			1	
	Asbury Park	1,640	1	31.8	1,584	56	1		33.5															
Pa.....	Philadelphia	846,980	380	23.4	815,182	31,798	350	30	22.4	49.2			123				3		2		41	5	5	
	Pittsburgh	156,381	100	33.4	152,290	4,091	99	1	33.9	13.0			42				9		9		14			
	Erie	27,730	8	15.1	27,499	231	8		15.2				4				3		2		2			
	Reading	43,280	13	15.7	42,926	354	13		15.9				8								2			
Del....	Wilmington	42,499	36	44.2	37,023	5,476	27	9	38.0	85.7			10	7							2			
D. C ...	Dist. of Col.	180,000	82	23.7	120,000	60,000	50	32	21.7	27.7			17	15			1		1		12	7		
Va.....	Norfolk	21,966	9	21.4	11,933	10,033	5	4	22.1	20.5			1	1			1					1		
	Richmond	63,803	34	27.8	35,756	28,047	16	18	23.3	33.8			4	8			1	1		1		5		
	Lynchburg	15,959	7	22.9	7,484	8,475	3	4	20.9	25.3			2	1							1	2		
N. C ...	Wilmington	17,361	3	9.0	6,893	10,486	2	1	15.1	5.0				1										
S. C....	Charleston	49,999	49	51.1	22,713	27,287	18	31	41.9	58.9			5	13							2	6		
Ga.....	Augusta	23,023	15	34.0	12,364	10,659	9	6	37.9	29.7			4	4							2			1
	Atlanta	37,421	14	19.3	21,086	16,335	6	8	14.6	25.5			3	3					1		1	1		
	Savannah	30,681	26	44.2	15,007	15,674	9	17	31.3	54.6			4	3				1			2	5		
	Rome	3,877	3	40.2	2,154	1,723	2	1	49.0	30.2												1		
	Brunswick	2,891	4	72.0	1,445	1,446	2	2	73.8	73.8			2									1		
Fla	Jacksonville	5,563	4	37.5	3,095	2,468	4		68.8				2								1			
	Key West	9,890	4	39.6	6,746	3,144	3	1	23.2	16.5			1								1	1		
Ala....	Mobile	31,205	19	31.8	16,837	14,368	10	9	30.8	32.7			4	3							3			
	Selma	7,529	4	27.8	3,345	4,184		4		51.2				1								2		
Miss...	Columbus	5,519	2	18.8	1,933	3,586	2		53.8															
	Natchez	7,058	2	14.7	3,421	3,637	1	1	15.1	14.4											1			
	Vicksburg	11,814	4	17.7	5,975	5,839		4		36.0				1									2	
	Verona	1,000			650	350																		
La.....	New Orleans	216,140	160	38.5	159,128	57,231	113	47	37.2	42.1				60	15		8	1			15	8		

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 14, 1881.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.													
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
												1		2						4								8		Portland	Me.
												2																		Bangor	
												2																3		Concord	N. H.
																												1		Burlington	Vt.
3		14	1	3		2						20				5				3		1						75	1	Boston	Mass.
		4										1																10		Cambridge	
																												1		Edgartown	
																												11		New Bedford	
																												3		Newburyport	
												2																1		Marblehead	
												1																3		Nantucket	
																														Plymouth	
												1										1						7		Fall River	
1				1		1						3								1								15		Lowell	
						2						1																5		Lawrence	
										1																		3		Pittsfield	
										1		1				1				1		1						12		Worcester	
				2								1																5		Lynn	
						3						1																1		Brockton	
																												2		Holyoke	
																														Bridgewater	
																												2		Milford	
																												1		Chicopee	
												1																4		Fitchburgh	
																												1		Somerville	
												2				1												8		Springfield	
1																												1		Spencer	
												1																2		Quincy	
																														Northampton	
												1																2		Haverhill	
		2																										1		Gloucester	
												1		1		1												2		Chelsea	
1																														Clinton	
																												1		Beverly	
												3																5		Attleborough	
1		1				1																								Malden	
		1										5																5		Salem	
		1								1		1				1												2		Taunton	
										2																		2		Westboro'	
																												3		Woburn	
												1		1														4		Weymouth	
																1												1		Waltham	
																												1		Webster	
																												1		Westfield	
										1																		4		Brookline	
		1																				1						3		Newton	
		4								2		4								1		1				2		26	1	Providence	R. I.
				1								2	1	2		1						3		1				12		New Haven	Conn
												1																3		Waterbury	
																														Fairfield	
														1								1						6		Norwich	
29		48		6		10		13		55		83				35				15		12		19		3		333		New York	N. Y.
5		25	1	2		4		4		22		20				6	1			3		2		1		2		151	1	Brooklyn	
												1		1		2												8		Yonkers	
																												6		Poughkeepsie	
																												5		Newburgh	
		4						1				3				3		1										14		Rochester	
1		1				1				6		7				2						1						25		Buffalo	
																														Watertown	
										1										1								1		Binghamton	
																												1		Cambridge	
																												2		Seneca Falls	
												2														1		3		Utica	
														1														1		Tarrytown	
																						1						2		Little Falls	
		2						1		5		5				1						4		6				44		Hudson Co.	N. J.
2		2		1		2		2				4				3												37		Newark	
												2																1		Orange	
				1						3						2								2	1			9	1	Camden	
										1																		1		Plainfield	
												1																		Asbury Park	
9		6		3	1	6				19		20	1	6		7	2	2						32	3			198	18	Philadelphia	Pa.
4		3				3				12		11												1						Pittsburgh	
		1																												Erie	
						1						1																9		Reading	
		2								2						1				1				6	6			13	3	Wilmington	Del.
3	1	1					1	1	1			4	4			2	2							1				24	16	Dist. of Col.	D. C
			1																									4	2	Norfolk	Va.
						1	1					1									1	1					1	12	8	Richmond	
																												2	2	Lynchburg	
																						1						1	1	Wilmington	N. C.
	3									3	3	1	1															12	18	Charleston	S. C.
1	1			1								1	1			1				1		1						1	3	Augusta	Ga.
1							1					1																2	6	Atlanta	
						2	1						2														1	5	7	Savannah	
																												2		Rome	
												1				1					1									Brunswick	
																												3		Jacksonville	Fla.
						1																1								Key West	
						1										1				1	1						1	4	7	Mobile	Ala.
																													2	Selma	
												1																1		Columbus	Miss.
									1												1								1	Natchez	
																														Vicksburg	
																														Verona	
28	5				2			2	2	6	4	1	3							3				1				54	22	New Orleans	La.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 14, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
La	Shreveport	11,017	4	18.9	3,739	7,276	1	3	13.9	21.7				2							1			
	Baton Rouge	7,217	2	14.5	2,917	4,300	2		35.8												1			
Tex	San Antonio	20,561	17	43.7	17,525	3,036	14	3	41.8	51.4			10	2			1			1		1	1	
	Austin	10,960	4	19.0	7,349	3,611	2	2	14.2	29.2			1	2							1			
	Waco	7,296	10	71.1	4,716	2,580	8	2	88.5	40.4			4											
	Galveston	22,253	17	39.9	16,900	5,353	14	3	42.4	29.6			8	2			1				1			
	Marshall	5,622	2	18.5	2,836	2,786	1	1	18.3	18.2			1	1										
Ark	Little Rock	13,185	2	13.9	8,636	4,549		2		22.8														
Tenn	Nashville	43,461	20	24.0	27,004	16,457	12	8	23.2	25.7			3	2			1				1	3		
	Memphis	33,593	15	23.3	18,622	14,971	3	12	8.4	41.8			1	6				1	1			1		
	Clarksville	3,860			2,134	1,726																		
	Murfreesboro'	3,800	2	27.2	1,777	2,023	2		59.6				1								1			
	Trenton	1,400	1	37.2	828	535	1		63.0															
Ky	Louisville	123,762	41	17.3	102,842	20,920	36	5	18.3	12.5			6	3			1		1		7	2		
	Bowling Green	5,111			3,254	1,857																		
Ohio	Cincinnati	255,708	114	23.3	247,538	8,170	105	9	22.1	58.4			36				6		5		17			
	Cleveland	160,140	82	26.7	158,094	2,048											1		3		9		2	
	Gallipolis	4,400	1	11.8	3,474	926	1		14.8															
	Dayton	38,677	13	17.4	37,684	993	12	1	16.5	54.4			7											
	Portsmouth	11,314	5	23.1	10,346	968	4	1	20.8	53.9			2	1			1				1			
Ind	Indianapolis	75,074	30	20.9	68,558	6,516	27	3	20.7	24.0			8				2		4		3	2	1	
	Richmond	12,743	4	16.4	12,106	637	4		17.3				1								1			
	Evansville	29,280	12	21.4	26,563	2,717	8	4	15.6	76.8			2	1					2	1	2			
Ill	Chicago	503,304	361	37.4	496,620	6,684							230				8		25		19		6	
	Peoria	29,315	15	26.7	28,821	494	15		27.2				2						1		2			
	Aurora	11,825	6	26.5	11,612	213	6		26.6				1								1			
	Jacksonville	10,927	2	9.5	10,222	705	2						1											
	Elgin	8,789	8	47.6	8,647	142	8		48.0				2				4							
	Moline	7,805	4	26.7	7,673	132	4		26.9								1		2					
	Rock Island	11,660	10	43.7	11,473	187	10		44.1				7				2		3					
	Lake	18,396	8	38.6	18,385	11	8		38.6		2,704	3	7				1							
Wis	Milwaukee	115,578	60	26.9	115,275	303	60		27.1				36				2		2		8			
	Beloit	4,790	5	54.0	4,696	94	5		54.2								3		1		1			
Minn	Saint Paul	41,498	11	13.8	41,000	498	11		14.0															
Mich	East Saginaw	19,016	5	13.7	18,832	184	5		13.8				2				1		1					
	Flint	8,410	4	24.8	8,163	247	4		25.6												2			
	Lansing	8,319	1	6.3	8,109	210	1		6.4															
Iowa	Dubuque	25,000	2	4.2			2		4.2				1											
Mo	Saint Louis	350,522	127	18.9	328,232	22,290	109	18	17.3	42.8			50	4			8	1	11		12	3		
	Kansas City	55,813	8	8.0	47,637	8,176	7	1	7.6	6.7			4				1				1			
Nebr	Omaha	30,518	6	10.3	29,680	838	6		10.6				4				1		3					
Kans	Lawrence	8,511			6,515	1,996																		
Utah	Salt Lake	20,768	11	27.6	20,591	177	10	1	25.0	394.0			5									1		
Colo	Boulder	3,069	1	17.0	3,024	45	1		17.1				1											
Cal	San Francisco	233,956	68	15.2	210,515	23,441	56	12	13.8	27.0			18				1				10			
	Vallejo	6,587	2	15.8	6,303	284	2		16.5				1											
	Los Angeles	11,311	4	18.5	10,498	813	4		19.9				1								1			
		8,262,016	4,104	25.9									1,428	153			149	5	122	4	460	64	48	2

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

HAVANA, CUBA.—For the week ending May 13, there are reported 2 deaths from yellow fever, 12 from typhoid fever, and 33 from small-pox. No contagious disease was known to exist among the merchant shipping.

MERIDIAN, MISS., May 12.—The local board of health has organized, with the following officers: A. H. Smith, M. D., president; M. L. Lowry, M. D., health officer; J. H. Blanks, M. D., secretary; R. V. Love and W. A. Brown, members.

THE NATIONAL BOARD OF HEALTH.

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NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 14, 1881—Continued.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.													
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The following reports for the week ending May 14, 1881, are from places in which burial permits are not required:

Allegheny, Pa., 79,000; deaths, 29: under 5 years, 19; accidental 1, cerebro-spinal meningitis 3, consumption 2, diarrhœa 1, diphtheria 1, typhoid fever 1, scarlet fever 5, pneumonia 2, congestion of lungs 1, bronchitis 3. Bath, Me., 8,000; deaths, 7; under 5 years, 3; consumption 2, bronchitis 1, measles 1, croup 1. Bucyrus, Ohio, 3,950; deaths, 3; under 5 years, 1; consumption 1, measles 1. Calais, Me., 6,172; no deaths. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 4; under 5 years, 3; consumption 1, scarlet fever 3. Clinton, Mich., 1,200; no deaths. Coldwater, Mich., 5,000; deaths, 2; typhoid fever 1, pneumonia 1. Columbus, Ga., 10,000; deaths, 9; under 5 years, 4; accident 1, consumption 2, diarrhœa 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,327; deaths, 4; under 5 years, 2. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Greenville, S. C., 6,159; no deaths. Gunn City, Mo., 150; no deaths. Helena, Mont., 3,630; death, 1; diphtheria 1. Hernando, Miss., 1,000; deaths, 3; accident 1, diarrhœa 1, erysipelas 1. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; deaths, 3; consumption 1, pneumonia 1. Indianola, Tex., 900; deaths, 2. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,250; no deaths. La Salle, Ill., 8,885; deaths, 4; under 5 years, 1; typhus fever 2, whooping cough 1. Louisiana, Mo., 5,000; deaths, 2; pneumonia 1. Madison, Ind., 9,009; deaths, 2; pneumonia 1. Martinsburg, W. Va., 6,334; deaths, 3; consumption 2. Meridian, Miss., 4,013; no deaths. Milan, Tenn., 1,800; death, 1. Milledgeville, Ga., 3,000; no deaths. Muscatine, Iowa, 8,412; deaths, 3; scarlet fever 1. Muskegon, Mich., 11,300; deaths, 3; consumption 1, erysipelas 1. Painesville, Ohio, 5,504; death, 1. Pass Christian, Miss., 2,500; no deaths. Pearlington, Miss., 1,200; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, Cal., 5,000; no deaths. Springfield, Ohio, 21,000; deaths, 15; under 5 years, 6; consumption 5, pneumonia 1, measles 1, whooping cough 2. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; no deaths. Tuskaloosa, Ala., 2,000; death, 1. Winchester, Va., 5,000; deaths, 4; under 5 years, 1. Winona, Minn., 10,000; deaths, 7; under 5 years, 3; malarial fever 3, measles 1, puerperal 1. Youngstown, Ohio, 15,421; deaths, 12; under 5 years, 7; accidents 2, diarrhœa 2, diphtheria 1, malarial fever 1, pneumonia 1, congestion of lungs 1, bronchitis 1, measles 1. Total population, 300,888; deaths under 5 years, 51; total number of deaths, 126; annual rate per 1,000, 21.8.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, JUNE 4, 1881. [No. 49.

ANNUAL MEETING OF THE NATIONAL BOARD OF HEALTH.

The annual meeting of the National Board of Health was held in the city of Washington, D. C., convening on June 1 and adjourning June 2, 1881.

The Board re-elected its former officers.

BY-LAWS OF THE NATIONAL BOARD OF HEALTH.

1st. The officers of the National Board of Health shall consist of a president, vice-president, and secretary.

2d. There shall be an executive committee, composed of the president vice-president, secretary, and three other members.

3d. The officers of the Board and the other members of the executive committee shall be elected by ballot at the first annual meeting in each year, the nomination to be by informal ballot.

4th. The duties of the president shall be—

First. To preside at all meetings of the Board and of the executive committee.

Second. To call meetings as provided in the act creating the Board.

Third. To make requisitions upon the Secretary of the Treasury for such sums as may be directed by the Board.

5th. The vice-president shall take the place and perform the duties of the president when absent.

6th. The secretary shall keep the records and conduct the correspondence of the Board and of the executive committee, certify to the correctness of all vouchers for expenditures, and perform such other duties as the Board or executive committee may from time to time direct, and he shall be the custodian of all papers, books, and other property of the Board.

7th. The executive committee shall carry into effect the directions of the Board, and act for it during the intervals of its sessions, reporting such action to the next meeting.

8th. The executive committee is authorized to fill any vacancies in the offices or executive committee occurring in the intervals of the meetings of the Board, such election to hold good until the close of the next meeting of the Board.

9th. No purchases shall be made or expenditures incurred except by order of the Board or of the executive committee, and the executive committee shall not have power to incur any indebtedness beyond the amount of funds authorized by the Board to be drawn by the president and placed to the credit of the Board with its disbursing agent.

10th. The executive committee shall be considered to be in permanent session, and, in the interval of the regular meetings, any three members, of whom the secretary shall be one, shall constitute a quorum, and be authorized to transact any business, provided there be a concurrent vote. In case of disagreements the secretary shall be required to report the fact to the absent members and solicit an expression of their wishes as to the call of a formal meeting of the whole committee, or as to taking a vote by correspondence.

11th. All bills for salaries and expenses shall be duly certified by a member or inspector of the Board, and audited and approved by the secretary of the Board, who shall keep an accurate record of such vouchers and approvals.

12th. The standing committees of the Board shall be as follows, each to be composed of not less than three members, named by the president, with the exception of that on epidemic and contagious diseases, which shall consist of five members:

1. On epidemic and contagious diseases.
2. On registration and vital statistics.
3. On State, municipal, and local sanitary legislation.
4. On quarantine legislation—State, national, and international.

13th. The regular meetings of the Board shall be semi-annual, in June and December of each year, at a day and place to be fixed by the executive committee.

14th. The president shall call a meeting of the Board whenever five members make in writing or by telegraph a joint request to him to that effect.

THE NATIONAL BOARD OF HEALTH.

PRESTON H. BAILHACHE, M. D., U. S. M. H. S., 509 Maple ave., Le Droit Park, Washington, D. C.
SAMUEL M. BEMISS, M. D., &c., 558 St. Charles st., New Orleans, La.
JOHN S. BILLINGS, M. D., U. S. A., 84 Gay st., Georgetown, D. C.
JAMES L. CABELL, M. D., &c., University of Virginia, Va.
CHARLES F. FOLSOM, M. D., 113 Boylston st., Boston, Mass.
HOSMER A. JOHNSON, M. D., &c., 4 W. Sixteenth st., Chicago, Ill.
ROBERT W. MITCHELL, M. D., &c., 34 Madison st., Memphis, Tenn.
SAM'L F. PHILLIPS, Esq., Solicitor-Gen'l, 1119 K st., Washington, D. C.
STEPHEN SMITH, M. D., &c., 31 West Forty-second st., New York.
THOS. J. TURNER, M. D., U. S. N., 1227 M st., Washington, D. C.
TULLIO S. VERDI, M. D., &c., 815 14th st., N. W., Washington, D. C.

OFFICERS.

JAMES L. CABELL, LL. D., &c., President.
JOHN S. BILLINGS, Surgeon United States Army, Vice-President.
THOMAS J. TURNER, Medical Director U. S. N., Secretary.

EXECUTIVE COMMITTEE.

Dr. James L. Cabell, Dr. John S. Billings, Dr. Thomas J. Turner, Dr. Stephen Smith, Dr. Preston H. Bailhache, Hon. S. F. Phillips.

LAWS RELATING TO THE NATIONAL BOARD OF HEALTH.

Constituting act.

AN ACT to prevent the introduction of infectious or contagious diseases into the United States, and to establish a National Board of Health.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established a National Board of Health to consist of seven members, to be appointed by the President, by and with the advice and consent of the Senate, not more than one of whom shall be appointed from any one State, whose compensation, during the time when actually engaged in the performance of their duties under this act, shall be ten dollars per diem each and reasonable expenses, and of one medical officer of the Army, one medical officer of the Navy, one medical officer of the Marine Hospital Service, and one officer from the Department of Justice, to be detailed by the Secretaries of the several departments and the Attorney General, respectively, and the officers so detailed shall receive no compensation. Said board shall meet in Washington within thirty days after the passage of this act and in Washington or elsewhere from time to time upon notice from the president of the board, who is to be chosen by the members thereof, or upon its own adjournments, and shall frame all rules and regulations authorized or required by this act, and shall make or cause to be made such special examinations and investigations at any place or places within the United States, or at foreign ports, as they may deem best, to aid in the execution of this act and the promotion of its objects.

SEC. 2. The duties of the National Board of Health shall be to obtain information upon all matters affecting the public health, to advise the several departments of the government, the executives of the several States, and the Commissioners of the District of Columbia, on all questions submitted by them, or whenever in the opinion of the board such advice may tend to the preservation and improvement of the public health.

SEC. 3. That the Board of Health with the assistance of the Academy of Science, which is hereby requested and directed to co-operate with them for that purpose, shall report to Congress at its next session a full statement of its transactions, together with a plan for a national public health organization, which plan shall be prepared after consultation with the principal sanitary organizations and the sanitarians of the several States of the United States, special attention being given to the subject of quarantine, both maritime and inland, and especially as to regulations which should be established between State or local systems of quarantine and a national quarantine system.

SEC. 4. The sum of fifty thousand dollars, or so much thereof as may be necessary, is hereby appropriated to pay the salaries and expenses of said board and to carry out the purposes of this act.

Approved, March 3, 1879.

AN ACT to prevent the introduction of contagious or infectious diseases into the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be unlawful for any merchant ship or vessel from any foreign port where any contagious or infectious disease exists, to enter any port of the United States except in accordance with the provisions of this act, and all rules and regulations of State boards of health and all rules and regulations made in pursuance of this act; and any such vessel which shall enter, or attempt to enter, a port of the United States, in violation thereof, shall forfeit to the United States a sum, to be awarded in the discretion of the court, not exceeding one thousand dollars, which shall be a lien upon said vessel, to be recovered by proceedings in the proper district court of the United States. And in all such proceedings the United States district attorney for such district shall appear on behalf of the United States, and all such proceedings shall be conducted in accordance with the rules and laws governing cases of seizure of vessels for violation of the revenue laws of the United States.

SEC. 2. All such vessels shall be required to obtain from the consul, vice-consul, or other consular officer of the United States at the port of departure, or from the medical officer, where such officer has been detailed by the President for that purpose, a certificate in duplicate setting forth the sanitary history of said vessel, and that it has in all respects complied with the rules and regulations in such cases prescribed for securing the best sanitary condition of the said vessel, its cargo, passengers, and crew; and said consular or medical officer is required, before granting such certificate, to be satisfied the matters and things therein stated are true; and for his services in that behalf he shall be entitled to demand and receive such fees as shall by lawful regulation be allowed, to be accounted for as is required in other cases.

That upon the request of the National Board of Health the President is authorized to detail a medical officer to serve in the office of the consul at any foreign port for the purpose of making the inspection and giving the certificates hereinbefore mentioned: *Provided*, That the number of officers so detailed shall not exceed at any one time six: *Provided further*, That any vessel sailing from any such port without such certificate of said medical officer, entering any port of the United States, shall forfeit to the United States the sum of five hundred dollars, which shall be a lien on the same to be recovered by proceedings in the proper district court of the United States. And in all such proceedings the United States district attorney for such district shall appear on behalf of the United States, and all such proceedings shall be conducted in accordance with the rules and laws governing cases of seizure of vessels for violation of the revenue laws of the United States.

SEC. 3. That the National Board of Health shall co-operate with and, so far as it lawfully may, aid State and municipal boards of health in the execution and enforcement of the rules and regulations of such boards to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, and into one State from another; and at such ports and places within the United States as have no quarantine regulations under State authority where such regulations are, in the opinion of the National Board of Health, necessary to prevent the introduction of contagious or infectious diseases into the United States from foreign countries, or into one State from another; and at such ports and places within the United States where quarantine regulations exist under the authority of the State, which, in the opinion of the National Board of Health, are not sufficient to prevent the introduction of such diseases into the United States, or into one State from another, the National Board of Health shall report the facts to the President of the United States, who shall, if, in his judgment, it is necessary and proper, order said Board of Health to make such additional rules and regulations as are necessary to prevent the introduction of such diseases into the United States from foreign countries, or into one State from another, which, when so made and approved by the President, shall be promulgated by the National Board of Health, and enforced by the sanitary authorities of the States, where the State authorities will undertake to execute and enforce them; but if the State authorities shall fail or refuse to enforce said rules and regulations the President may detail an officer or appoint a proper person for that purpose.

The Board of Health shall make such rules and regulations as are authorized by the laws of the United States and necessary to be observed by vessels at the port of departure and on the voyage where such vessels sail from any foreign port or place at which contagious or infectious disease exists, to any port or place in the United States, to secure the best sanitary condition of such vessel, her cargo, passengers, and crew, and when said rules and regulations have been approved by the President they shall be published and communicated to, and enforced by, the consular officers of the United States: *Provided*, That none of the penalties herein imposed shall attach to any vessel or any owner or officer thereof, till the act and the rules and regulations made in pursuance thereof shall have been officially promulgated for at least ten days in the port from which said vessel sailed.

SEC. 4. It shall be the duty of the National Board of Health to obtain information of the sanitary condition of foreign ports and places from which contagious and infectious diseases are or may be imported into the United States, and to this end the consular officers of the United States at such ports and places as shall be designated by the National Board of Health shall make to said Board of Health weekly reports of the sanitary condition of the ports and places at which they are respectively stationed, according to such forms as said Board of Health may prescribe; and the Board of Health shall also obtain, through all sources accessible, including State and municipal sanitary authorities throughout the United States, weekly reports of the sanitary condition of ports and places within the United States; and shall prepare, publish, and transmit to the medical officers of the Marine Hospital Service, to collectors of customs, and to State and municipal health officers and authorities, weekly abstracts of the consular sanitary reports and other pertinent information received by said board; and shall also, as far as it may be able, by means of the voluntary co-operation of State and municipal authorities, of public associations and private persons, procure information relating to the climatic and other conditions affecting the public health; and shall make to the Secretary of the Treasury an annual report of its operations, for transmission to Congress, with such recommendations as it may deem important to the public interests; and said report, if ordered to be printed by Congress, shall be done under the direction of the board.

SEC. 5. That the National Board of Health shall from time to time issue to the consular officers of the United States and to the medical officers serving at any foreign port, and otherwise make publicly known, the rules and regulations made by it and approved by the President, to be used and complied with by vessels in foreign ports for securing the best sanitary condition of such vessels, their cargoes, passengers, and crews, before their departure for any port in the United States, and in the course of the voyage, and all such other rules and regulations as shall be observed in the inspection of the same on the arrival thereof at any quarantine station at the port of destination, and for the disinfection and isolation of the same, and the treatment of cargo and persons on board, so as to prevent the introduction of cholera, yellow fever, or other contagious or infectious diseases; and it shall not be lawful for any vessel to enter said port to discharge its cargo or land its passengers except upon a certificate of the health officer at such quarantine station, certifying that said rules and regulations have in all respects been observed and complied with, as well on his part as on the part of the said vessel and its master, in respect to the same and to its cargo, passengers, and crew; and the master of every such vessel shall produce and deliver to the collector of customs at said port of entry, together with the other papers of the vessel, the said certificates required to be obtained at the port of departure and the certificate herein required to be obtained from the health officer at the port of entry.

SEC. 6. That to pay the necessary expenses of placing vessels in proper sanitary condition, to be incurred under the provisions of this act, the Secretary of the Treasury be, and he hereby is, authorized and required to make the necessary rules and regulations fixing the amount of fees to be paid by vessels for such service, and the manner of collecting the same.

SEC. 7. That the President is authorized, when requested by the National Board of Health, and when the same can be done without prejudice to the public service, to detail officers from the several departments of the government, for temporary duty, to act under the direction of said board, to carry out the provisions of this act; and such officers shall receive no additional compensation except for actual and necessary expenses incurred in the performance of such duties.

SEC. 8. That to meet the expenses to be incurred in carrying out the provisions of this act, the sum of five hundred thousand dollars, or so much thereof as may be necessary, is hereby appropriated, to be disbursed under the direction of the Secretary of the Treasury on estimates to be made by the National Board of Health, and to be approved by him. Said National Board of Health shall as often as quarterly make a full statement of its operations and expenditures under this act to the Secretary of the Treasury, who shall report the same to Congress.

SEC. 9. That so much of the act entitled "An act to prevent the introduction of contagious or infectious diseases into the United States", approved April twenty-ninth, eighteen hundred and seventy-eight, as requires consular officers or other representatives of the United States at foreign ports to report the sanitary condition of and the departure of vessels from such ports to the Supervising Surgeon-General of the Marine Hospital Service, and so much of said act as requires the Surgeon-General of the Marine Hospital Service to frame rules and regulations, and to execute said act, and to give notice to Federal and State officers of the approach of infected vessels, and furnish said officers with weekly abstracts of consular sanitary reports, and all other acts and parts of acts inconsistent with the provisions of this act be, and the same are hereby, repealed.

SEC. 10. This act shall not continue in force for a longer period than four years from the date of its approval.

Approved, June 2, 1879.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

ABSTRACTS FROM CONSULAR REPORTS.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys reports no contagious diseases during the month of March. There were 62 deaths, in a population of 20,000, in Bridgetown, giving an annual death-rate of 36.5 per 1,000. Mean temperature, 82°.

BARBADOES, WEST INDIES.—United States Consul W. H. Polleys has received a note from the local authorities, under date of April 30, stating that three cases of yellow fever have recently occurred, two of which were fatal. But, after careful inquiry, the board of health has decided that there is no reason to suspend the issue of clean bills of health to vessels, and the consul is satisfied that all due precautions are taken to prevent the spread of the disease.

BUENOS AYRES.—The report of United States Consul E. L. Baker for the month of March gives only one death from small-pox; there were 25 from typhoid fever and 12 from diphtheria. The total mortality was 466 in a population of 270,000, being at an annual rate of 20.3 per 1,000. Mean temperature, 72°. The quarantine against Rio de Janeiro still continues.

CHINESE PORTS.—Reports from Amoy and Foochow to March 26 state that those ports continue free from contagious diseases. Advices from Ningpo to April 9 report some small-pox, which usually prevails at this season, from the practice of inoculation.

GUADALOUPE.—United States Consul C. Bartlett reports 9 cases of yellow fever, with 5 deaths, for the week ending April 16. General sanitary condition of Pointe à Pitre not satisfactory.

MALTA AND GOZO.—U. S. Consul C. B. Eynaud reports for the four weeks ending April 15, 4 deaths from typhoid fever. Deaths from all causes, 313; population, 154,830; annual death-rate, 26.3 per 1,000.

MARACAIBO, VENEZUELA.—United States Consul E. H. Plumacher sends reports for March and April, showing that no statistics of mortality can be obtained. Yellow fever may be considered endemic, but does not generally prevail to any alarming extent, nor in severe form. The draining and cleaning of the town are very defective.

SANDWICH ISLANDS.—United States Consul D. A. McKinly reports, under date of May 4, that in Honolulu small-pox still prevails, and caused 77 deaths, out of a total of 128, in the month of April. No other contagious disease is noted.

SANTIAGO DE CUBA.—For the month of April United States Consul J. C. Landreau reports 4 deaths from yellow fever, 3 from small-pox, and 14 cases of typhoid fever, with 7 deaths. The yellow fever was confined to the Spanish troops, and the port continues free of disease, so that clean bills of health are issued. Total mortality for the month, 92; population, 40,000; annual death-rate, 28.0 per 1,000.

SINGAPORE.—United States Consul A. G. Studer reports this district free from epidemic or contagious diseases up to April 4.

ST. THOMAS, WEST INDIES.—United States Consul Victor Thompson reports, under date of April 22, that a body of stagnant water, surrounded by marshes, about a mile inland from the bay, has become very offensive. This is regarded as the source of malarial fevers and other diseases now prevailing. The crowding of the black population in the filthy alleys of the town also contributes to the unsanitary condition of the port. No yellow fever is reported.

VERA CRUZ, MEXICO, April 24.—United States Consul S. T. Trowbridge reports 5 deaths among soldiers recently arrived from the interior. Small-pox has disappeared, and there is no reason at present for detaining healthy vessels in quarantine.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, ***but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it***, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

MONTHLY REPORT OF MORTALITY IN CITIES OF THE UNITED STATES.

Cities and States.	Month.	Population.	Deaths under 5 years.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Cerebro-spinal meningitis.	Consumption.	Croup.	Diarrhœal diseases.	Diphtheria.	FEVER.				Lung diseases, acute.	Measles.	Puerperal diseases.	Small-pox.	Whooping-cough.	All zymotic diseases.	Accidents.
											Enteric.	Malarial.	Scarlet.	Yellow.							
	1881.																				
Providence, R. I	April	104,855	58	200	22.9	.....	35	2	1	15	6	.....	7	.....	29	4	5	....	1	....	5
New Haven, Conn	do	63,000	23	99	19.1	.....	12	.....	.....	4	2	2	3	.....	15	.....	4	....	....	13	....
Meriden, Conn	do	19,000	.....	13	8.3	2	2	.....	.....	2	.....	.....	.....	.....	1	.....	.....	....	....	....	1
New London, Conn	do	10,529	.....	12	13.9	.....	4	.....	.....	4	.....	.....	.....	.....	4	.....	.....	....	....	....	....
Dunkirk, N. Y	do	8,000	6	21	31.8	2	4	1	.....	3	.....	.....	.....	.....	2	.....	1	....	....	....	2
Little Falls, N. Y	do	6,940	.....	5	8.8	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....
Yonkers, N. Y	do	19,000	5	24	15.4	.....	4	1	.....	.....	.....	.....	.....	.....	6	.....	1	....	....	....	1
Vineland, N. J	do	8,000	1	2	3.0	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....
Scranton, Pa	do	40,000	14	42	12.8	1	5	5	4	1	1	.....	1	.....	4	.....	.....	....	1	12	3
Wilmington, Del	do	42,500	38	114	32.7	.....	16	3	2	.....	.....	.....	10	.....	5	.....	.....	16	....	....	4
District of Columbia	March	180,000	149	372	24.2	.....	77	5	3	5	2	2	1	.....	82	.....	1	....	2	31	11
Do	April	180,000	134	385	25.7	1	85	4	7	7	5	5	2	.....	60	1	5	....	1	41	8
Norfolk, Va	do	21,966	22	57	31.5	1	7	.....	4	6	.....	2	.....	.....	17	.....	1	....	....	13	....
Petersburg, Va	do	22,000	12	31	17.1	.....	5	.....	1	.....	1	.....	.....	.....	6	.....	.....	....	....	....	....
Mobile, Ala	January	31,295	19	88	33.1	.....	15	1	3	.....	.....	.....	.....	.....	16	.....	.....	....	....	5	2
Do	February	31,295	18	50	18.5	.....	9	.....	3	.....	.....	.....	.....	.....	3	.....	.....	....	....	3	1
Do	March	31,295	13	48	17.7	.....	10	.....	1	.....	1	.....	.....	.....	4	1	1	....	1	4	2
Brownsville, Tex	do	5,800	.....	20	41.9	.....	4	.....	1	.....	.....	.....	.....	.....	2	.....	.....	7	....	....	....
Nashville, Tenn	April	43,461	33	94	26.3	1	21	2	3	1	.....	.....	1	.....	14	8	2	....	1	21	2
Shelby County, Tenn	do	35,593	44	123	43.1	.....	.....	.....	5	1	.....	2	.....	.....	19	3	4	....	....	....	8
Toledo, Ohio	March	52,000	25	77	18.0	1	14	1	.....	4	.....	8	1	.....	15	.....	2	....	1	10	3
Detroit, Mich	April	116,342	81	185	19.4	.....	24	5	1	6	2	.....	.....	.....	27	.....	4	2	1	....	3
Lansing, Mich	do	8,319	7	13	19.0	.....	1	.....	1	1	.....	.....	.....	.....	1	1	.....	....	....	....	....
Logansport, Ind	do	11,198	3	13	14.1	.....	2	.....	.....	.....	.....	1	.....	.....	3	.....	.....	....	....	....	....
Chicago, Ill	do	503,298	462	984	23.8	40	115	25	58	40	10	5	23	.....	165	9	17	31	11	....	34
Milwaukee, Wis	March	115,761	54	187	19.7	12	21	3	4	6	3	2	13	.....	19	.....	5	....	....	....	1
Saint Paul, Minn	April	41,500	33	78	22.9	8	5	1	2	1	2	.....	1	.....	13	1	1	....	....	....	3
Keokuk, Iowa	do	12,125	8	25	25.1	.....	6	.....	.....	.....	.....	.....	.....	.....	2	1	2	....	....	....	....
Oakland, Cal	do	35,000	9	32	11.1	.....	4	.....	.....	1	1	.....	.....	.....	6	.....	.....	....	1	4	....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 21, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	10	15.4	33,480	330	10	.....	15.6	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
N. H	Concord	13,831	1	3.8	13,771	67	1	.....	3.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vt	Burlington	11,364	3	13.8	11,248	116	2	1	9.3	449.8	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Mass	Boston	362,535	141	20.3	356,535	6,000	140	1	25.1	8.7	.....	.....	40	.....	.....	.....	11	.....	.....	.....	34	1	6	.....
	Cambridge	52,740	17	16.7	51,222	1,518	17	.....	17.3	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Edgartown	1,301	.....	.....	1,238	63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Bedford	26,875	10	19.4	25,349	1,526	10	.....	20.5	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Newburyport	13,537	8	30.8	13,469	68	8	.....	30.8	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Plymouth	7,094	3	22.1	6,930	164	3	.....	22.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fall River	49,006	16	17.0	48,846	160	16	.....	17.1	.....	.....	.....	10	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
	Lawrence	39,178	11	14.7	39,026	152	11	.....	14.8	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Marblehead	7,467	4	28.0	7,456	11	4	.....	28.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Lowell	59,485	21	18.4	59,307	178	21	.....	18.4	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....
	Pittsfield	13,367	3	11.7	13,027	320	3	.....	12.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lynn	38,284	11	15.0	37,730	554	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....
	Brockton	13,608	4	15.3	13,569	39	4	.....	15.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Holyoke	21,851	8	19.1	21,822	29	8	.....	19.1	.....	.....	.....	3	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....
	Bridgewater	3,620	1	14.4	3,594	26	1	.....	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Milford	9,310	4	22.4	9,267	43	4	.....	22.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Chicopee	11,325	3	13.8	11,324	1	3	.....	13.8	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Fitchburg	12,405	6	25.2	12,368	37	6	.....	25.2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Somerville	24,985	8	16.7	24,906	79	8	.....	16.7	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Springfield	33,340	9	13.1	32,592	748	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Spencer	7,466	4	27.8	7,459	7	4	.....	27.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Quincy	10,529	6	29.7	10,438	91	6	.....	29.8	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Northampton	12,172	4	17.1	12,044	128	4	.....	17.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Haverhill	18,475	5	14.1	18,306	169	5	.....	14.2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Gloucester	19,329	6	16.4	19,309	20	6	.....	16.4	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Chelsea	21,785	7	16.6	21,253	532	7	.....	17.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Clinton	8,030	.....	.....	8,019	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Beverly	8,445	4	25.3	8,421	24	4	.....	25.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Attleboro'	11,111	7	32.9	10,975	136	7	.....	33.3	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Malden	12,017	5	21.7	11,959	58	5	.....	21.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Salem	27,598	10	18.9	27,396	202	10	.....	19.1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
	Taunton	21,213	7	17.0	21,102	111	7	.....	17.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Westboro'	5,214	2	20.0	5,178	36	2	.....	20.1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Woburn	10,938	2	9.6	10,907	31	2	.....	9.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Weymouth	10,571	3	14.9	10,521	50	3	.....	15.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Waltham	11,711	1	4.4	11,692	19	1	.....	4.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Webster	5,696	4	36.7	5,652	44	4	.....	36.7	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Westfield	7,587	2	13.6	7,525	62	2	.....	13.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brookline	8,053	1	6.5	8,036	17	1	.....	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Newton	16,995	3	9.1	16,780	215	3	.....	9.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
R. I	Providence	104,855	49	24.4	101,209	3,646	45	4	23.2	54.9	.....	.....	18	1	.....	.....	.....	.....	1	.....	8	2	1	.....
Conn	New Britain	13,978	2	7.5	13,903	75	2	.....	7.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Waterbury	20,269	6	15.4	20,117	152	6	.....	15.5	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fairfield	3,748	.....	.....	3,603	145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Norwich	21,141	4	9.7	20,579	562	4	.....	10.1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
N. Y	New York	1,206,577	693	29.9	1,186,144	20,433	673	20	29.5	51.1	.....	.....	264	.....	.....	.....	21	.....	20	..	107	.....	12	.....
	Brooklyn	566,689	197	18.2	558,474	8,215	192	5	17.9	31.8	.....	.....	70	1	.....	.....	8	.....	..	.....	34	2	4	.....
	Yonkers	18,892	3	8.3	18,528	364	3	.....	8.5	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Poughkeepsie	20,207	6	15.5	19,513	694	6	.....	16.4	.....	.....	.....	2	.....	.....	.....	1	.....	..	.....	..	.....	.....	.....
	Newburg	18,050	5	14.5	17,480	570	5	.....	14.9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Rochester	89,363	41	23.9	88,843	518	41	.....	24.0	.....	.....	.....	13	.....	.....	.....	.....	.....	4	.....	5	.....	1	.....
	Buffalo	155,137	85	28.6	154,292	845	85	.....	28.7	.....	.....	.....	42	.....	.....	.....	4	.....	2	.....	4	.....	1	.....
	Watertown	10,697	4	19.5	10,589	108	4	.....	19.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Cambridge	1,850	1	29.1	1,800	50	1	.....	29.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Peekskill	7,009	1	7.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Port Jervis	8,874	5	29.4	.....	.....	4	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J	Hudson Co	187,950	68	18.9	186,254	1,696	.....	.....	.....	.....	.....	.....	22	.....	.....	.....	1	.....	.....	.....	6	.....	1	.....
	Newark	136,400	55	21.0	133,074	3,236	53	2	20.9	31.4	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....
	Orange	13,206	3	11.9	12,749	457	3	.....	12.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Camden	41,658	15	18.8	38,064	3,594	12	3	16.4	43.2	.....	.....	4	.....	.....	.....	1	.....	.....	.....	3	2	.....	.....
	Plainfield	8,126	.....	.....	7,633	493	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Asbury Park	1,640	1	31.8	1,584	56	1	.....	33.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa	Philadelphia	846,980	366	22.5	815,182	31,798	330	36	21.1	59.1	.....	.....	128	.....	.....	.....	4	.....	1	.....	43	5	4	1
	Pittsburgh	156,381	64	21.4	152,290	4,091	61	3	20.9	39.1	.....	.....	30	3	.....	.....	5	.....	4	.....	4	.....	.....	.....
	Erie	27,730	4	7.6	27,499	231	4	.....	7.7	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Reading	43,280	8	9.6	42,926	354	8	.....	9.8	.....	.....	.....	5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Del	Wilmington	42,499	21	25.8	37,023	5,476	13	8	18.3	76.2	.....	.....	3	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
D. C	Dist. of Col	180,000	60	17.3	120,000	60,000	37	23	16.0	19.9	.....	.....	9	6	.....	.....	2	.....	2	.....	2	7	.....	.....
Va	Norfolk	21,966	9	21.4	11,933	10,033	5	4	22.1	20.5	.....	.....	2	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....
	Richmond	63,803	30	24.5	35,756	28,047	12	18	17.5	33.8	.....	.....	7	6	.....	.....	.....	.....	1	1	.....	6	.....	.....
	Lynchburg	15,959	8	26.1	7,481	8,475	4	4	27.9	25.3	.....	.....	1	1	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
W. Va	Wheeling	31,266	13	21.2	30,551	715	12	1	20.4	72.9	.....	.....	6	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....
N. C	Wilmington	17,361	9	27.1	6,893	10,468	4	5	30.2	24.8	.....	.....	1	2	.....	.....	1	.....	.....	.....	1	.....	.....	.....
S. C	Charleston	49,999	42	43.8	22,713	27,286	21	21	48.9	39.9	.....	.....	10	11	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Ga	Augusta	23,023	11	24.9	12,364	10,659	7	4	29.5	19.8	.....	.....	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Atlanta	37,421	21	28.9	21,086	16,335	10	11	24.4	35.0	.....	.....	4	4	.....	.....	.....	.....	.....	.....	3	2	.....	.....
	Savannah	30,681	27	45.9	15,007	15,674	9	18	31.3	57.8	.....	.....	7	9	.....	.....	.....	.....	1	.....	1	3	.....	.....
	Rome	3,877	2	26.8	2,154	1,723	1	1	24.5	30.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brunswick	2,891	3	54.0	1,445	1,446	1	2	36.9	73.8	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Fla	Jacksonville	5,563	1	9.4	3,095	2,468	1	.....	17.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Key West	9,890	4	21.0	6,746	3,144	4	.....	30.9	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Ala	Mobile	31,205	17	28.4	16,837	14,368	10	7	30.8	25.4	.....	.....	4	2	.....	.....	1	.....	.....	.....	.....	2	.....	.....
	Selma	7,529	3	20.9	3,345	4,184	.....	3	.....	38.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Miss	Columbus	5,519	.....	.....	1,933	3,586	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Natchez	7,058	1	7.4	3,421	3,637	1	.....	15.1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Vicksburg	11,814	2	8.8	5,975	5,839	.....	2	.....	18.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Verona	1,000	.....	.....	650	350	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La	New Orleans	216,140	157	37.8	159,128	57,231	102	55	33.6	50.2	.....	.....	53	20	.....	.....	3	2	.....	.....	13	8	.....	1
	Shreveport	11,017	4	18.9	3,739	7,276	1	3	13.9	21.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Baton Rouge	7,217	2	14.5	2,917	4,300	1	1	17.9	12.3	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Tex	San Antonio	20,561	19	48.9	17,525	3,036	16	3	47.8	51.5	.....	.....	7	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....
	Austin	10,960	6	28.5	7,349	3,611	5	1	35.5	14.6	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
	Waco	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 21, 1881.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.														
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
																				1								5		Portland	Me.
																												1		Concord	N. H.
																												1		Burlington	Vt.
3		6		2		3						11				7						1						56		Boston	Mass.
		1		1								1				1		1										9		Cambridge	
																														Edgartown	
				2								1																6		New Bedford	
		1				1																						5		Newburyport	
										1																		2		Plymouth	
		1		2												2												9		Fall River	
1		1																										7		Lawrence	
												1																2		Marblehead	
1		1				1						1								1								8		Lowell	
										1																		2		Pittsfield	
		1										1																6		Lynn	
		2										1																1		Brockton	
1												1				1												2		Holyoke	
																												1		Bridgewater	
																												2		Milford	
																												2		Chicopee	
														1														5		Fitchburg	
		1																										6		Somerville	
		2																										4		Springfield	
																						1				1		2		Spencer	
		1																										4		Quincy	
																												3		Northampton	
				1																								2		Haverhill	
		1										1				1												3		Gloucester	
		1										1																2		Chelsea	
																														Clinton	
																												2		Beverly	
										1		1										1						3		Attleboro'	
																1												3		Malden	
				1								2																3		Salem	
												2																4		Taunton	
										1										1										Westboro'	
																												2		Woburn	
																												3		Weymouth	
																												1		Waltham	
																												2		Webster	
																												2		Westfield	
																												1		Brookline	
																												1		Newton	
1		3	1	1						1		3				2				1		1						22	1	Providence	R. I.
																												1		New Britain	Conn
												2				1												3		Waterbury	
																												2		Fairfield	
																														Norwich	
32		38		4		8		8		33		55				23				13		6		20		3		290		New York	N. Y.
3		16		1				1		7		7	2	2		3						6		2		2		96	1	Brooklyn	
																												1		Yonkers	
										1				1														3		Poughkeepsie	
																												4		Newburg	
1		4						1		2		2		1								1						19		Rochester	
2		3								4		13																49		Buffalo	
																												2		Watertown	
																														Cambridge	
																												1		Peekskill	
								1				1																3		Port Jervis	
1		1		1				1		1		9										5		2				39		Hudson Co	N. J.
1		5		1		1				2		3		1		1												30	2	Newark	
																		1										2		Orange	
										1																		7	1	Camden	
																														Plainfield	
												1																		Asbury Park	
6		11	1	1		1		1		12		21	3	3	1	3	4			1				18	5	3		199	16	Philadelphia	Pa.
	1	2				2				10	1	4	1			3				3		1		1				22		Pittsburgh	
1																												2		Erie	
		1								1																		5		Reading	
2						1								1								1		3	4			5	3	Wilmington	Del.
	2	1				1		1	2			3	1	1			1			2								22	10	Dist. of Columbia	D. C.
		1										1																2	3	Norfolk	Va.
															2		1								1	1		10	7	Richmond	
														1								1							2	Lynchburg	
3					1								1															5		Wheeling	W. Va.
										2																			5	Wilmington	N. C.
8	3									4	2																	9	15	Charleston	S. C.
2	1	1										1	1									1						2	2	Augusta	Ga.
1	1	1											1							1								4	7	Atlanta	
2					1	1							3															4	11	Savannah	
													1															1	1	Rome	
																													2	Brunswick	
1																														Jacksonville	Fla.
1																													2	Key West	
1				1				1								1				1								6	3	Mobile	Ala.
	2																													Selma	
																														Columbus	Miss.
																				1										Natchez	
																													2	Vicksburg	
																														Verona	
31	8			1			1	2	1	5	1	3	3									1						44	29	New Orleans	La.
													2															1	1	Shreveport	
																												1		Baton Rouge	
4						1						1	1															8	2	San Antonio	Tex.'
													1							1								2		Austin	
4													1		1													7	2	Waco	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 21, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Tex....	Galveston	22,253	17	39.9	16,900	5,353	13	4	39.4	39.4	.....	.....	9	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Marshall.....	5,622	2	18.5	2,836	2,786	.....	2	.....	36.4	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Ark. ..	Little Rock...	13,185	4	15.8	8,636	4,549	1	3	6.1	34.2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	1	.....	.....
Tenn ..	Nashville	43,461	24	14.4	27,004	16,457	9	15	17.4	48.2	.....	.....	4	8	.....	.....	.....	.....	.....	.....	1	1	.....	.....
	Memphis	33,593	19	29.5	18,622	14,971	9	10	25.1	34.8	.....	.....	2	3	.....	.....	1	1	.....	.....	.....	1	.....	.....
	Clarksville ...	7,250	2	27.0	4,000	3,250	2	.....	48.8	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
	Murfreesboro'	3,800	.....	.....	1,777	2,023	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Trenton	1,383	2	74.6	828	555	2	.....	.....	187.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Franklin.....	2,466	1	21.1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky	Louisville	123,645	42	17.7	102,842	20,920	33	9	16.7	22.4	.....	.....	6	6	.....	.....	.....	.....	3	.....	6	2	.....	.....
	Bowling Green	5,111	2	20.4	3,254	1,857	.....	2	.....	56.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio ...	Cincinnati	255,708	81	16.5	247,538	8,170	77	4	16.2	26.0	.....	.....	43	.....	.....	.....	1	.....	3	.....	11	.....	.....	.....
	Cleveland.....	160,140	56	18.3	158,094	2,048	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	5	.....	1	.....
	Gallipolis	4,400	2	23.6	3,474	926	1	1	14.8	56.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dayton	38,677	13	17.4	37,684	993	12	1	16.5	54.4	.....	.....	2	.....	.....	.....	1	.....	.....	.....	2	1	.....	.....
	Portsmouth...	11,314	1	4.6	10,346	968	.....	1	.....	53.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind	Indianapolis..	75,074	19	13.2	68,558	6,516	17	2	13.0	16.0	.....	.....	7	.....	.....	.....	2	.....	.....	1	4	1	.....	.....
	Richmond	12,743	3	12.3	12,106	637	1	2	4.3	163.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	2	.....	.....
	Evansville....	29,280	8	14.3	26,563	2,717	5	3	9.7	57.6	.....	.....	2	.....	.....	.....	1	.....	.....	1	1	1	.....	.....
Ill	Chicago	503,304	270	28.0	496,620	6,684	.....	.....	.....	.....	.....	.....	154	.....	.....	.....	6	.....	19	.....	15	.....	12	.....
	Peoria	29,315	9	16.0	28,281	494	7	2	12.7	211.0	.....	.....	2	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
	Jacksonville..	10,927	2	9.6	10,222	705	2	.....	10.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Elgin	8,789	4	23.8	8,647	142	4	.....	24.0	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
	Moline.....	7,805	1	6.7	7,673	172	1	.....	6.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Rock Island ..	11,660	8	34.9	11,473	187	8	.....	35.3	.....	.....	.....	3	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....
	Aurora	11,825	1	4.4	11,612	213	1	.....	4.6	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Lake	18,396	13	36.8	18,385	11	13	.....	36.8	.....	2,704	3	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Wis ..	Milwaukee ...	115,578	55	24.7	115,275	303	55	.....	24.8	.....	.....	.....	27	.....	.....	.....	.....	.....	7	.....	5	.....	.....	.....
Minn ..	Saint Paul ...	41,498	10	12.5	41,000	498	10	.....	12.7	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
Mich ..	East Saginaw .	19,016	4	11.0	18,832	184	4	.....	11.1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
	Flint	8,410	5	31.0	8,163	247	5	.....	32.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Lansing	8,319	2	12.7	8,109	210	2	.....	12.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa ..	Dubuque	22,254	5	11.8	22,106	148	5	.....	12.0	.....	.....	.....	2	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....
	Keokuk	12,117	7	30.1	11,066	1,051	6	1	28.3	49.1	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Mo	Saint Louis ...	350,522	114	17.0	328,232	22,290	96	18	15.2	42.8	.....	.....	30	6	.....	.....	12	1	11	3	5	5	.....	.....
	Kansas City ..	55,813	11	10.3	47,637	8,176	6	5	6.5	31.9	.....	.....	2	1	.....	.....	1	.....	.....	.....	.....	2	.....	.....
Nebr ..	Omaha.....	30,518	12	20.5	29,680	838	12	.....	21.1	.....	.....	.....	8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Utah ..	Salt Lake	20,768	7	17.6	20,591	177	7	.....	17.7	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo ...	Boulder.....	3,069	.....	.....	3,024	45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cal	San Francisco.	233,956	87	19.4	210,515	23,441	75	12	18.5	27.1	.....	.....	27	.....	.....	.....	.....	.....	.....	.....	5	1	1	.....
	Vallejo	6,587	1	7.9	6,303	284	1	.....	8.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Los Angeles ..	11,311	5	23.1	10,498	813	5	.....	24.6	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		8,103,023	3,474	22.1	.....	.....	.....	.....	.....	.....	.....	.....	1,227	111	.....	.....	103	4	94	8	408	63	49	4

SANITARY LEGISLATION IN FLORIDA.

An act to provide for the appointment of boards of health for incorporated cities and towns in this State containing three hundred or more registered voters.

The people of the State of Florida represented in the Senate and Assembly do enact as follows:

SECTION 1. The governor of the State of Florida shall appoint for every incorporated city and town in this State containing three hundred or more registered voters, a board of health, consisting of five discreet persons, not less than two of whom shall be medical men of acknowledged skill and experience, to serve without pay. All vacancies occurring shall be filled by appointment made by the governor.

SEC. 2. The mayor of the city or town and the chairman of the board of county commissioners shall be *ex-officio* members of said boards.

SEC. 3. Said boards of health shall be appointed for the term of four years, and a majority of the members shall constitute a quorum for the transaction of business.

SEC. 4. Said boards of health as thus created shall have full power to act in regard to all matters pertaining to the public health and vital statistics, and are empowered to make such rules and regulations as they may deem necessary for their government and the protection of the public health, abatement of nuisances, &c., and the jurisdiction of each board of health shall extend to the boundaries of the county in which it is located; and in case there be more than one such board in any county the jurisdiction of each shall extend to a line midway between them.

SEC. 5. In all matters of quarantine said boards of health shall have the same powers as are conferred upon boards of health in the provisions of an act entitled "An act to provide a uniform system of quarantine in this State," approved March 11, 1879.

SEC. 6. This act shall in no wise be construed as repealing section 1 of an act entitled "An act to provide a uniform system of quarantine in this State," approved March 11, 1879, so far as it relates to cities and towns of less than three hundred registered voters.

Approved March 7, 1881.

A true copy of the original statute.

[SEAL.] J. S. LEONARD, *N. Public.*

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

ATLANTA, GA.—In reply to an inquiry concerning certain reports in the newspapers of epidemic disease in the city of Atlanta, Dr. J. B. Baird, health officer, makes the following statements, under date of May 26:

The alarm which led to the reports of an epidemic of scarlet fever, and a possible case of yellow fever, was caused by the following circumstances: On May 9 a lady and two of her children became suddenly ill, the symptoms being sore throat, vomiting, purging, and a cutaneous efflorescence. They all died within forty-eight hours. Two or three days after, the third and last child in the family was similarly attacked, and died in a few days. It was thought by the attending physician, and by some of those consulting, that the disease was scarlet fever, but one of the latter attributed the deaths to poisoning from impure well-water. The publication of these deaths, more or less embellished and presented in a sensational manner, gave rise to the reports of an epidemic of scarlet fever. No other cases occurred, and the panic among the citizens soon subsided. Even a sporadic case of scarlet fever is rarely reported in Atlanta, and the disease is not known to have existed at any time as an epidemic. Only three or four deaths from this cause are recorded within the past year.

As to the rumor of a possible case of yellow fever in Atlanta, it can only be said that it is absolutely without foundation. No case of that disease was ever developed in Atlanta, nor did it ever spread from those who were affected with yellow fever after seeking refuge here during the epidemic of 1878. In previous epidemics, also, people from infected districts have died of yellow fever in Atlanta, but the disease has never been known to extend even to those in attendance upon the sick. During these epidemics no quarantine precautions were taken.

The report of Dr. Baird is supported by official statements from the president of the city board of health and from the superintendent of public schools, showing that there has been no ground whatever for any report of epidemic or contagious disease in Atlanta.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 21, 1881—Continued.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		FEVER. Malarial.		FEVER. Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		ACUTE LUNG DISEASES. Congestion of lungs.		ACUTE LUNG DISEASES. Bronchitis, acute.		ACUTE LUNG DISEASES. Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
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170	20	127	2	23	1	39	1	29	6	108	4	192	24	27	5	68	8	2	....	42	....	33	3	54	13	15	1	1,537	182		

HAVANA, CUBA.—For the week ending May 20 there are reported 3 deaths from yellow fever, 32 from small-pox, and 11 from typhoid fever. The British bark *Ada Barton* sailed for Ship Island about May 16, leaving her captain in hospital with small-pox. He was taken sick May 12, on board of his vessel, and was removed May 14, when the crew were vaccinated and the vessel disinfected. No yellow fever is reported among the shipping.

POISONOUS COLORING OF TOYS.

M. L. de Geoffroy, chargé d'affaires, informs the Government of the United States, under date of May 18, that the French Government has taken decided measures to prevent the manufacture, importation, or exportation of toys colored with poisonous pigments. These measures apply to toys manufactured in foreign countries, as well as to those of French manufacture. The custom-house officers of France have been instructed to allow no such articles to pass the frontier, and this notice is given in order that American shippers may not order goods subject to seizure.

The following reports, for the week ending May 21, are from places in which burial permits are not required:

Allegheny, Pa., 79,000; deaths, 19; under 5 years, 12; accident 1, cerebro-spinal meningitis 3, consumption 1, diphtheria 1, scarlet fever 3, congestion of lungs 1, bronchitis 1, whooping-cough 1. Bath, Me., 8,000; deaths, 4; under 5 years, 1; bronchitis 1. Belfast, Me., 5,308; death, 1. Brattleborough, Vt., death, 1; consumption 1. Bucyrus, Ohio, 3,950; death 1; puerperal 1. Calais, Me., 6,172; deaths, 3; consumption 1. Carrollton, Miss., 600; no deaths. Chillicothe, Ohio, 11,000; deaths, 4; under 5 years, 2; accident 1, consumption 2, scarlet fever 1. Clinton, Mich., 1,200; no deaths. Coldwater, Mich., 4,800; no deaths. Columbus, Ga., 10,000; deaths, 4; under 5 years, 4; diarrhœa 3, pneumonia 1. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Dallas, Tex., 10,327; deaths, 11; under 5 years, 4; consumption 1, diarrhœa 3, congestion of lungs 2. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Greenville, S. C., 6,500; death, 1. Gunn City, Mo., 150; no deaths. Hernando, Miss., 1,000; deaths, 3; accidents 2, malarial fever 1. Helena, Mont., 3,630; no deaths. Huntingdon, Pa., 4,500; death, 1; consumption 1. Huntingdon, Tenn., 1,200; no deaths. Indianola, Tex., 900; no deaths. Iuka, Miss., 810; no deaths. Jefferson, Tex., 3,250; deaths, 2; measles 1. Kenosha, Wis., 5,500; death, 1; cerebral meningitis 1. La Salle, Ill., 8,885; deaths, 2; under 5 years, 1; consumption 1, whooping-cough 1. Louisiana, Mo., 5,000; deaths, 4; under 5 years, 1; consumption 2, pneumonia 1, congestion of lungs 1. Madison, Ind., 9,009; deaths, 2; under 5 years, 1; consumption 1. Meridian, Miss., 4,013; deaths, 2; under 5 years, 1; pneumonia, 1. Milan, Tenn., 1,800; no deaths. Milford, Mich., 1,400; deaths, 2; accident 1. Milledgeville, Ga., 3,000; deaths, 4; under 5 years, 3; diarrhœa 1, typhoid fever 1. Muscatine, Iowa, 8,412; death, 1; scarlet fever 1. Muskegon, Mich., 11,300; deaths, 4; under 5 years, 3; malarial fever 3, bronchitis 1. Ocala, Fla., 1,000; no deaths. Painesville, Ohio, 5,504; death, 1. Pass Christian, Miss., 2,500; death, 1; measles 1. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Port Gibson, Miss., 1,200; no deaths. Port Royal, S. C., 750; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, Cal., 5,000; no deaths. Senatobia, Miss., 935; cerebro-spinal meningitis 1, malarial fever 1. Springfield, Ohio, 21,000; deaths, 7; under 5 years, 3; consumption 1, measles 1. Starkville, Miss., 1,454; no deaths. Titusville, Pa., 9,046; no deaths. Tuskaloosa, Ala., 2,000; no deaths. Winchester, Va., 5,000; no deaths. Youngstown, Ohio, 15,089; no deaths. Total population, 301,572; deaths under 5 years, 37; total number of deaths, 88; annual rate per 1,000, 15.2.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	May 16	3	34.8								1					53
Bermuda	Hamilton	14,867	May 24	2	7.0													76
Cuba	Havana	195,437	May 14	178	47.5				2		38		10					80
U. S. of Columbia	Colon, Aspinwall	3,000	May 14	5	86.1													86
Mexico	Matamoras	16,000	May 15	5	16.2													
Do	....do	16,000	May 22	15	48.9													
Do	Acapulco	3,500	Apr. 24	6	89.5					9	1							86
Do	....do	3,500	May 1	4	59.6					10	4							86
St. Helena	Jamestown	6,421	Apr. 23	1	8.4													81.5
Teneriffe	Santa Cruz	16,610	Apr. 23	7	22.0					3		2						64.7
Ireland	Queenstown	10,000	May 14	3	15.7													
Do	....do	10,000	May 21	5	26.1					3								
Do	Belfast	230,000	May 7	117	34.9								1				3	
Do	....do	230,000	May 14	82	24.4								1					
Do	Dublin	333,401	May 7	176	27.5						1		3				5	48.9
Do	....do	333,401	May 14	191	29.8								4		3		9	49.6
Scotland	Glasgow	601,266	May 7	244	21.2								12				16	46.8
Do	Dundee	140,000	May 7	67	24.9							2	1					46.1
Do	....do	140,000	May 14	51	19.0													51.0
England	London	3,707,180	May 7	1,472	20.7						88		8				152	51.0
Do	Bradford	197,196	May 13	75	21.4												3	
Do	Newcastle-on-Tyne	149,000	May 7	59	20.2								1				1	
Do	Liverpool	549,834	May 14	221	20.9						1	2	3	27	7	30	12	51.2
Do	Sheffield	284,403	May 14	123	22.5													48.8
Do	Tunstall	29,673	May 14	7	12.2													56.2
Wales	Cardiff	83,389	May 14	22	13.7						1		1					52.0
France	Paris	1,988,806	May 14	1,128	29.6						20		38				98	
Do	Rouen	104,209	May 14	75	37.3													
Do	Havre	92,068	May 7	49	27.7													54.1
Holland	Amsterdam	316,952	May 7	161	26.5												3	52
Do	Rotterdam	152,515	May 14	64	21.8											34		
Switzerland	Geneva	50,233	May 7	19	20.0												1	55.8
Do	....do	50,233	May 14	13	14.0												2	51.6
Do	Zurich	25,329	May 7	11	22.9													
Germany	Berlin	1,123,571	Apr. 30	591	27.4					14	5	6	3	3		103	60	45.1
Do	Breslau	273,000	Apr. 30	154	29.4								2				12	42.6
Do	Brunswick	75,000	May 7	30	21.1												4	52.4
Do	....do	75,000	May 14	50	35.1												4	46.2
Do	Barmen	95,000	May 7	53	29.7												3	39.0
Do	Bremen	112,200	Apr. 30	54	25.2												8	
Do	Cologne	144,750	May 7	78	28.0												9	
Do	Frankfort	137,000	May 7	52	20.2													54.7
Do	Mannheim	53,500	May 14	21	20.5													52.3
Bavaria	Nuremberg	99,519	Apr. 16	67	35.1													47.6
Do	....do	99,519	Apr. 23	52	27.3												4	43.7
Do	....do	99,519	Apr. 30	61	32.0													43.7
Do	Munich	230,000	May 7	141	32.0								1				12	
Belgium	Brussels	401,745	May 7	197	25.5						2						9	
Saxony	Dresden	220,216	May 7	116	26.8											6	6	54.7
Do	Chemnitz	91,135	Apr. 30	49	26.9												2	44.0
Do	Leipsic	151,616	May 7	67	22.9													49.9
Italy	Genoa	185,000	May 14	82	23.2													59.0
Do	Rome	309,996	Apr. 23	119	16.1						3		1				12	54.0
Austria	Vienna	730,911	May 7	452	32.2						17		2				11	56.4
Roumania	Bucarest	177,646	May 7	108	31.7								1				5	
Hungary	Budapesth	370,037	Apr. 30	268	23.7						11				7		1	
Russian Poland	Warsaw	379,763	Apr. 30	194	26.6						1							44.7
Sweden	Stockholm	173,433	Apr. 30	90	28.7												6	38.4
Norway	Christiania	120,000	Apr. 23	56	24.3					2		3				9	3	35.9
Do	....do	120,000	Apr. 30	53	23.8													38.1
Portugal	Lisbon	225,152	Apr. 23	145	33.5													55.7
Spain	Cadiz	65,028	Apr. 30	33	26.4													68.8
Africa	Algiers	68,055	Mar. 6	56	42.8							1	1				2	
Do	....do	68,055	Mar. 13	69	52.6												7	
Do	....do	68,055	Mar. 20	58	44.2							2	2				6	
Do	....do	68,055	Mar. 27	61	46.6												6	
Do	....do	68,055	Apr. 3	64	48.8							2	2				8	
Barbary	Tripoli	20,000	May 7	11	28.7													73.4
Cape Colony	Cape Town	35,000	Apr. 23	30	44.7													80
Seychelle Islands	Mahé	12,000	Mar 26	4	17.2													82
Do	....do	12,000	Apr. 2	4	17.2													84
Do	....do	12,000	Apr. 9	2	8.7													86
Do	....do	12,000	Apr. 16	3	13.0													86
India	Calcutta	429,535	Apr. 9	303	36.8		83				8		17				9	85.6
Do	....do	429,535	Apr. 16	379	46.0		123				13		21				5	85.2

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

National Board of Health

BULLETIN.

VOL. 2.] WASHINGTON, D. C., SATURDAY, JUNE 11, 1881. [No. 50.

SANITARY LEGISLATION IN LOUISIANA.

Dr. S. S. Herrick, secretary of the Louisiana State board of health, forwards copies of the following circular, ordinances, and acts of legislature, relating to sanitary inspection and measures:

[Circular No. 1.]

BOARD OF HEALTH, STATE OF LOUISIANA.

Sanitary measures to be enforced by the sanitary inspectors of the city of New Orleans.

OFFICE OF THE BOARD OF HEALTH
OF THE STATE OF LOUISIANA,
State House, May 16, 1881.

1. House-to-house inspections must be pressed as rapidly as possible.
2. Order the abatement of all nuisances.
3. Order the emptying and disinfection of all foul privies.
4. Order the periodic disinfection at intervals of not less than seven days of all privies and water-closets.
5. Order the cleaning and disinfection of all foul alleys and yards.
6. Enforce the ordinance which compels all citizens to place the garbage and refuse matters of dwellings, hotels, stores, markets, manufactories, and stables in boxes or barrels, or other suitable receptacles, for removal by the garbage-carts.

DISINFECTION.

The board of health of the State of Louisiana deem it important that the people should be instructed with regard to the value and importance of disinfection for the removal of foul gases and emanations, and for the destruction of the poisons of infectious and contagious diseases.

To accomplish the greatest good for the preservation of the health of the people, disinfection should be practiced at regular intervals throughout the entire year; but more fully and frequently in the city of New Orleans during the months of May, June, July, August, September, and October.

By disinfection and household sanitation, the people should seek to avert or prevent pestilence, and should not delay the practice of these important measures until disease is actually developed by the neglect and violation of sanitary laws. Each citizen, therefore, by obeying rigidly sanitary laws, becomes the guardian of the health of his household.

New Orleans is without sewers, and the privies necessarily contain at all times an immense amount of fecal matter. Even under the most energetic system of removal of the contents of the privies it is essential that disinfectants be used in this hot, moist climate at regular intervals. It should be borne in mind, however, that disinfection cannot be substituted for want of cleanliness or of ventilation, but should be used for the prevention of those putrefactive processes which result in the generation of compounds and agents deleterious to man.

In the selection of disinfectants reliable agents should be secured, which can be procured in a state of purity, and at so small a cost that they can be used in adequate quantities and at stated intervals.

DISINFECTANTS.

Disinfection of privies and water-closets.

For the disinfection of privies, cess-pools, water-closets, and vaults use the following: Sulphate of iron (green vitriol or copperas), eight pounds; Calvert's carbolic acid, No. 5, one pint; water, four gallons. Dissolve the green vitriol in hot water, and when cool add the carbolic acid. Add one gallon of this mixture to the privy or water-closet to be disinfected, and thereafter one quart every fifth day, or oftener, if any foul smell be evolved from the privy.

Lime should not be used in the disinfection of privies, as it decomposes the salts of ammonia.

This objection, however, does not apply to the sulphate of lime (plaster of Paris), which may be used with advantage in combination with carbolic acid and copperas.

The walls of privies and all unpainted wood-work should be whitewashed.

Foul drains, damp foul yards, stables, cow-houses, markets, and slaughter-houses.

Fresh-slaked lime, chloride of lime, plaster of Paris, and sulphate of iron should be sprinkled over damp and foul places, drains, and yards. For disinfection of such places a simple solution of sulphate of iron or copperas, in proportion of one and a half pounds to the gallon, may be used. The copperas solution may be prepared in large quantities for markets, stables, and slaughter-houses, foul yards, drains, and gutters by hanging a basket containing about seventy pounds of copperas in a barrel of water.

JOSEPH JONES, M. D.,
President Board of Health.

OFFICE BOARD OF HEALTH, STATE OF LOUISIANA,
New Orleans, ———.

———— ————, M. D.:

DEAR SIR: Your attention is invited to the following:
Ordinance, May 18, 1870.

SECTION 28. All practitioners of medicine, masters of any water craft, hotel, boarding or lodging house keepers, principal or masters of any boarding school or seminary, the chief officers or persons in charge of any public institution of charity or asylum, or otherwise, are hereby required to report, within twenty-four hours, to the office of the board of health, all cases within their cognizance of Asiatic cholera, yellow fever, typhus or ship fever, malignant scarlet fever, small-pox, varioloid, trichiniasis, or any other case that may at any time be specified by the board of health, and in default or failure to so report such cases, such person so failing or in default shall be liable to a fine not to exceed fifty dollars: *Provided, however,* That said board may declare it unnecessary to report further cases when any disease shall have been pronounced epidemic.

In addition to the list of diseases named above the board of health desire cases of diphtheria to be reported in like manner, and trust that you will never neglect to give timely information at this office, in accordance with the terms of the ordinance.

Very respectfully,

JOSEPH JONES, M. D.,
President.
S. S. HERRICK, M. D.,
Secretary.

OFFICE OF THE SUPERVISING INSPECTOR OF
THE NATIONAL BOARD OF HEALTH,
New Orleans, La., May 24, 1881.

———— ————.

DEAR SIR: It has been made my primary duty, as "the representative and chief executive agent" in this city of the National Board of Health, "to obtain the earliest possible information of the existence of yellow fever in New Orleans or its vicinity." To fulfill this duty, I am instructed, among other measures, *to endeavor to secure* from the "physicians of New Orleans and of the river parishes below New Orleans," and from the "sanitary and medical organizations of the city," prompt information "as to the presence of cases of yellow fever, or of doubtful or suspicious cases of this disease."

There are three considerations which deserve your attention when determining the question whether you will contribute this information: First, the health authorities of neighboring States insist that prompt notification of the whole truth respecting the appearance of yellow fever in New Orleans is indispensable for their own protection, and warn us that any failure to furnish this information will force them so to act that far greater detriment would thereby result to this city than from reports of all the facts. Second, all must concede that if the spread of yellow fever can be prevented, sanitary measures should be speedily applied to the very earliest cases, whether real or reasonably suspected. Third, the laws of Louisiana, as well as the regulations (authorized by the laws of the United States) of the National Board of Health, inferentially declare that yellow fever is a portable disease, inasmuch as they provide means to prevent its importation and its spread, and the ordinances of the city of New Orleans enforce the same view by enjoining the prompt report of all cases of this disease to the State board of health; hence, all law-abiding physicians and citizens are bound to facilitate the application of these

measures, even though they in some instances may be convinced that our laws are founded in error, and that no available measures can be or will be applied to prevent the importation and spread of yellow fever.

These facts justify this application to you for the aid indicated, and while you are under no legal obligation to give this aid to a sanitary officer of the National Board of Health, it is none the less believed that your compliance would not only promote the public welfare and the interests of science, but also would relieve you, in respect to the public health, from a very grave responsibility officially imposed on others.

Where the objection of the patient or of his attending physician would make my inspection of the former, in company with the latter, unadvisable, the attending physician is earnestly requested to keep and promptly to report a careful record of the history of every case which he knows or fears to be yellow fever; and the same course is deemed very desirable respecting all cases of hæmorrhagic malarial fever, or of other fevers which simulate yellow fever. Any summons for or report to me should be sent to my office, in the third story of the University building, at the corner of Common and Baronne streets, or to my residence, No. 24 South Rampart street, between Common and Canal streets, and any necessary expense incurred therefor will be refunded. If there should be satisfactory cause to request it, Dr. S. M. Bemiss, resident member of the National Board, would, no doubt, consent to serve as my substitute in examining any cases or supposed cases of yellow fever.

In order that you may better understand the character and purpose of the aid requested, a printed copy of my official instructions is inclosed, to which, and especially to Appendix D, your attention is solicited.

Since it is most important that I should know what are to be the sources of information upon which I can rely, you are earnestly requested to reply to this communication, furnishing your full address (and, if in the country, the location of your practice), and stating whether you will be good enough to give the aid solicited.

Very respectfully, yours,

STANFORD E. CHAILLÉ, M. D.,
Supervising Inspector of the National Board of Health,
P. O. Box 1689, *New Orleans, La.*

REPORT OF COMMITTEE AND RESOLUTIONS.

NEW ORLEANS, *May* 12, 1881.

SIR: Your committee, appointed to investigate certain complaints of citizens concerning the conduct of the nuisance wharf and the removal and final disposition of night-soil, beg leave respectfully to submit their report.

After a careful inspection of the nuisance wharf and boat, your committee is convinced that these complaints are true and should be immediately corrected. The rules and regulations of circular No. 2 issued by President Joseph Jones, M. D., August 3, 1880, are not complied with, at least not in the efficient manner as prescribed in said circular. We therefore recommend the strict enforcement of sec. 1, *a* and *b*, sec 2, sec. 3, sec. 4; we further recommend that two policemen at least should be detailed. Sec. 5, *a* and *b*, with reference to the nuisance wharf and boat, says:

"The windows of the house devoted to the reception of night-soil should be closed during the emptying of the barrels into the hold of nuisance boat, and during the discharge of the excrements into the boat, fresh air should be fully supplied to the house by means of bellows."

No such bellows are provided for, and it is utterly impossible for any human being to exist in such an atmosphere as created in these little rooms by the discharge of the excrements out of the barrels into the hold of the nuisance boat, without opening the doors or windows, and by allowing the free discharge of all accumulated stench.

Your committee therefore would recommend that the discharge out of the barrels into the hold of the boat should be done by some odorless apparatus, as now employed by the vidangeurs for the emptying of privies. A small engine would facilitate the work, and in this manner the emptying of the barrels could be accomplished odorless and without endangering the health of the employés and citizens living in the neighborhood of the wharf. In case the contents of the barrels are solid and of such a nature that they cannot be removed by the pumps, the barrels containing them should be taken on deck of the boat and emptied below the limits of the city, left bank below the red light of the United States barracks and right bank below the cluster of trees opposite United States barracks, below the settlement.

The openings for ventilation upon the roof of the house should be larger and the ventilating shafts higher, provided with charcoal furnaces, as prescribed, in which fire should be kept burning constantly during the day.

Sections *d* and *e* should be strictly enforced.

We would further recommend that at least one or more boats should be located in the different districts of the city. The distance of the present and only nuisance boat is too great from the city proper to accomplish any work, and it is of the greatest importance that the privies should be kept constantly clean, which, in our opinion, is utterly impossible with only one nuisance boat located such a distance from the most populated parts of the city.

Most respectfully,

Dr. F. LOEBER, *Chairman.*
J. C. BEARD, M. D.
E. HERNADEZ.

Dr. JOSEPH JONES;
President Board of Health, State of Louisiana.

Resolutions of board of health May 13, 1881, *relative to vidangeurs and nuisance wharf.*

BY DR. BEARD.

That we fully endorse the action of the president of the board, instructing sanitary officers to make affidavits against all vidangeurs who have violated and shall hereafter violate the law and health ordinances.

That the attorney of the board is instructed to prosecute all cases now pending and hereafter arising from such arrests.

A true copy from the minutes.

S. S. HERRICK, M. D.,
Secretary Board of Health.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

BAD LANDS CANTONMENT.—Dr. C. C. Miller, United States Army under date of June 1, reports that 3 cases of measles have occurred during May, at the railway station, about a quarter of a mile from the post. The patients were placed in a tent and isolated; the disease has not appeared at the post.

LITTLE ROCK, ARK.—Dr. J. A. Dibrell, secretary of the State board of health, forwards a set of the several blank forms adopted for statistics, &c., by the board as organized under the act published in No. 44 of the BULLETIN.

VIRGINIA CITY, NEVADA.—Dr. E. B. Harris, under date of May 29, states that the cities of Virginia and Gold Hill have recently been consolidated. Under the new act of incorporation, Dr. Harris resigns his position as president of the local board of health, which office is filled by Dr. Hall.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

DIAGRAM TO SHOW THE PROPORTION OF DEATHS PER 1,000 PER ANNUM AS RECORDED IN THE MORTALITY REPORTS FURNISHED THE NATIONAL BOARD OF HEALTH FOR THE FOUR WEEKS ENDING MAY 7, 14, 21, AND 28, 1881, FROM THE FOLLOWING PLACES.

[Oblique lines represent mortality under 5 **years** horizontal lines represent mortality over 5 years; **both represent total mortality per 1,000 per annum.]**

States.	Cities.	Total death-rate per 1,000.	Death-rate under 5 years.
Maine	Portland	20.4	6.8
New Hampshire	Concord	21.7	5.6
Vermont	Burlington	14.9	4.7
Massachusetts	Boston	21.8	7.7
	Edgartown	20.0	. . .
	New Bedford	18.4	5.3
	Cambridge	21.6	7.6
	Newburyport	20.2	4.8
	Marblehead	29.7	5.9
	Plymouth	9.2	1.8
	Fall River	16.0	7.8
	Lowell	21.2	8.1
	Lawrence	15.3	6.6
	Lynn	19.0	2.7
	Brockton	14.3	1.9
	Holyoke	20.3	5.9
	Bridgewater	11.4	. . .
	Milford	15.4	1.1
	Chicopee	11.5	2.3
	Fitchburg	24.1	8.4
	Somerville	11.5	5.2
	Springfield	18.4	5.5
	Spencer	19.2	8.7
	Northampton	10.8	1.1
	Haverhill	12.8	2.8
	Gloucester	15.0	6.1
	Chelsea	14.2	4.7
	Clinton	8.1	4.8
	Beverly	15.8	3.6
	Malden	22.8	3.3
	Salem	23.0	4.5
	Taunton	20.7	3.0
	Westboro'	22.5	10.0
	Weymouth	21.1	4.9
	Waltham	13.2	1.1
	Webster	20.6	9.2
	Westfield	20.3	5.1
	Brookline	16.2	6.4
Rhode Island	Providence	22.7	6.9
Connecticut	New Haven	16.4	5.0
	Waterbury	12.1	1.9
	Fairfield	11.2	. . .
	Norwich	15.2	1.8
New York	New York	30.5	12.7
	Brooklyn	22.2	8.9
	Poughkeepsie	16.1	3.2
	Newburg	15.8	2.2
	Rochester	21.4	7.6
	Cambridge	14.5	. . .
New Jersey	Newark	20.0	8.2
	Orange	16.8	8.5
	Camden	21.9	7.8
	Plainfield	16.3	4.9
	Asbury Park	15.9	. . .
Pennsylvania	Philadelphia	22.2	7.4
	Pittsburgh	26.0	10.9
	Erie	13.6	5.9
	Reading	19.8	8.1
Delaware	Wilmington	32.8	10.7
District of Columbia	District of Columbia	19.6	6.2
Virginia	Norfolk	25.5	7.1
	Richmond	24.1	7.5
	Lynchburg	22.5	3.2
South Carolina	Charleston	42.1	17.9
Georgia	Savannah	41.2	18.3
	Augusta	28.3	10.3
	Atlanta	20.2	7.9
	Rome	26.1	5.2
	Brunswick	36.0	22.5
Florida	Jacksonville	26.1	8.1
	Key West	23.8	13.0
Alabama	Mobile	27.6	9.6
	Selma	19.1	3.9
Mississippi	Columbus	7.5	2.5
	Natchez	14.7	5.5
	Vicksburg	17.6	3.3
Louisiana	New Orleans	37.3	16.6
	Shreveport	24.8	9.4
	Baton Rouge	12.7	7.2
Texas	San Antonio	43.9	22.5
	Austin	20.2	11.9
	Marshall	18.3	6.9
Arkansas	Little Rock	25.7	14.8
Tennessee	Nashville	24.3	8.7
	Memphis	30.7	10.1
	Clarksville	18.1	5.4
	Murfreesboro'	24.1	11.8
	Trenton	37.2	9.3
Kentucky	Louisville	15.9	4.4
	Bowling Green	20.4	2.5
Ohio	Cincinnati	19.9	7.9
	Dayton	17.1	6.3
	Gallipolis	17.4	. . .
	Portsmouth	13.8	5.7
Indiana	Indianapolis	17.2	5.0
	Evansville	10.7	3.6
	Richmond	12.3	5.1
Illinois	Chicago	31.0	18.2
	Peoria	22.3	4.9
	Aurora	12.1	2.2
	Jacksonville	11.9	5.9
	Elgin	29.7	8.9
	Moline	21.2	6.5
	Rock Island	38.1	26.1
	Lake	24.7	17.0
Wisconsin	Milwaukee	27.6	14.6
	Beloit	20.0	. . .
Michigan	East Saginaw	14.4	4.8
	Flint	27.7	5.5
Iowa	Dubuque	9.4	4.7
	Keokuk	15.6	3.2
Missouri	Saint Louis	17.4	6.2
	Kansas City	10.7	3.6
Nebraska	Omaha	12.4	7.7
Utah	Salt Lake City	21.3	13.2
California	San Francisco	17.3	5.0
	Vallejo	9.2	7.3

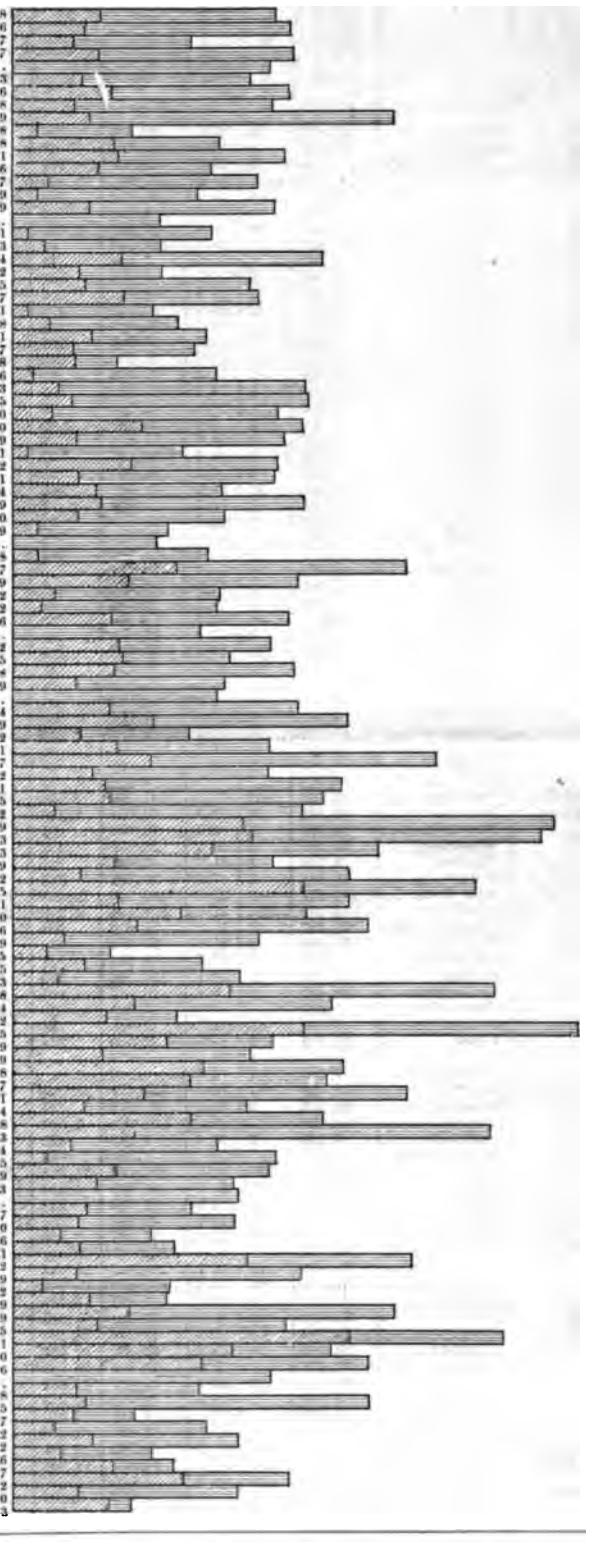

DIAGRAM REPRESENTING THE MORTALITY FOR THE MONTH OF MAY, 1881, FROM THE FOLLOWING PLACES.

New York	Amsterdam	11.3	. . .	
New Jersey	Vineland	7.5	4.5	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 28, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	15	23.1	33,480	330	15	.....	23.3	.....	.....	.....	6	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
N. H.	Concord	13,838	8	30.2	13,771	67	8	.....	30.3	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....
Vt	Burlington	11,364	5	23.0	11,248	116	5	.....	23.2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass	Boston	362,535	123	17.7	356,535	6,000	121	2	17.8	17.4	.....	.....	39	.....	.....	.....	3	.....	.....	.....	24	.....	1	.....
	Cambridge	52,740	25	24.5	51,222	1,518	25	.....	25.4	.....	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	5	.....	2	.....
	Edgartown	1,301	1	40.1	1,238	63	1	.....	42.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Bedford	26,875	10	19.4	25,349	1,526	10	.....	20.5	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Newburyport	13,537	7	27.0	13,469	48	7	.....	27.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Marblehead	7,467	5	34.2	7,456	11	5	.....	34.9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Plymouth	7,094	2	14.7	6,930	164	2	.....	15.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fall River	49,006	14	14.9	48,846	160	14	.....	15.0	.....	.....	.....	8	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....
	Lowell	59,485	21	18.4	59,307	178	21	.....	18.5	.....	.....	.....	7	.....	.....	.....	1	.....	.....	.....	7	.....	1	.....
	Lawrence	39,178	10	13.3	39,026	152	10	.....	13.4	.....	.....	.....	5	.....	.....	.....	1	.....	1	.....	3	.....	1	.....
	Worcester	58,295	22	19.7	57,528	767	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	3	.....	1	.....	3	.....	.....	.....
	Lynn	38,284	13	17.7	37,730	554	13	.....	17.9	.....	.....	.....	1	.....	.....	.....	.....	.....	2	.....	3	.....	.....	.....
	Brockton	13,608	3	11.5	13,569	39	3	.....	11.5	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Holyoke	21,851	8	19.1	21,822	29	8	.....	19.1	.....	.....	.....	5	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....
	Bridgewater	3,620	.....	.....	3,594	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Milford	9,310	1	5.6	9,267	43	1	.....	5.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Chicopee	11,325	3	13.8	11,324	1	3	.....	13.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fitchburg	12,405	2	8.4	12,368	37	2	.....	8.4	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Somerville	24,985	4	8.4	24,906	79	4	.....	8.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Springfield	33,340	11	17.2	32,592	748	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
	Spencer	7,466	2	14.0	7,459	7	2	.....	14.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Quincy	10,529	2	10.0	10,438	91	2	.....	10.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Northampton	12,172	.....	.....	12,044	128	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Haverhill	18,475	2	5.7	18,306	169	2	.....	5.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Gloucester	19,329	5	13.7	19,309	20	5	.....	13.7	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Chelsea	21,785	8	19.0	21,253	532	8	.....	19.6	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	1	.....
	Clinton	8,030	3	19.1	8,019	11	3	.....	19.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Beverly	8,445	2	12.6	8,421	24	2	.....	12.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Malden	12,017	4	17.4	11,959	58	4	.....	17.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Salem	27,598	14	26.4	27,396	202	14	.....	26.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Taunton	21,213	6	14.6	21,102	111	6	.....	14.8	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Westboro'	5,214	...	.....	5,178	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Woburn	10,938	1	4.8	10,907	31	1	.....	4.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Weymouth	10,571	5	24.8	10,521	50	5	.....	24.8	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
	Waltham	11,711	4	17.7	11,692	19	3	1	13.3	274.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Webster	5,696	2	18.3	5,652	44	2	.....	18.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Westfield	7,587	3	20.3	7,525	62	3	.....	20.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Brookline	8,053	.....	.....	8,036	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
R. I.	Providence	104,855	32	15.9	101,209	3,646	31	1	16.0	13.7	.....	.....	9	.....	.....	.....	1	.....	.....	.....	4	.....	1	.....
Conn.	New Haven	62,882	16	13.3	60,654	2,228	14	2	12.0	45.9	.....	.....	5	2	.....	.....	.....	.....	.....	.....	2	1	.....	.....
	New Britain	13,978	1	3.7	13,903	75	1	.....	3.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Waterbury	20,269	2	5.1	20,117	152	2	.....	5.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Fairfield	3,748	3	41.7	3,603	145	3	.....	43.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Norwich	21,141	3	7.3	20,579	562	3	.....	7.6	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
N. Y.	New York	1,206,577	639	27.6	1,186,144	20,433	628	11	27.6	28.1	.....	.....	256	.....	.....	.....	31	.....	13	.....	106	.....	22	.....
	Brooklyn	566,689	218	21.1	558,474	8,215	213	5	19.9	31.8	.....	.....	91	3	.....	.....	11	.....	2	.....	26	1	3	.....
	Poughkeepsie	20,207	6	15.5	19,513	694	6	.....	16.4	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Newburg	18,050	4	11.6	17,480	570	4	.....	11.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Rochester	89,363	37	21.6	88,845	518	37	.....	21.7	.....	.....	.....	11	.....	.....	.....	.....	.....	2	.....	6	.....	.....	.....
	Buffalo	155,137	61	20.1	154,292	845	61	.....	20.6	.....	.....	.....	24	.....	.....	.....	11	.....	.....	.....	8	.....	1	.....
	Watertown	10,697	2	9.8	10,589	108	2	.....	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Cambridge	1,850	.....	.....	1,800	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Seneca Falls	5,880	3	26.1	5,839	41	3	.....	26.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Utica	33,913	7	10.8	33,669	244	7	.....	10.9	.....	.....	.....	3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Port Jervis	8,874	2	11.8	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Peekskill	7,009	1	7.4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. J.	Newark	136,400	51	19.5	133,074	3,326	49	2	19.4	31.4	.....	.....	20	.....	.....	.....	1	.....	.....	.....	5	.....	.....	.....
	Orange	13,206	3	10.9	12,749	457	3	.....	12.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Camden	41,658	15	18.8	38,064	3,594	11	4	15.1	57.6	.....	.....	2	2	.....	.....	1	.....	.....	.....	2	.....	.....	.....
	Plainfield	8,126	3	19.6	7,633	493	3	.....	20.5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
	Asbury Park	1,640	.....	.....	1,584	56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa.	Philadelphia	846,980	317	19.5	815,182	31,798	299	18	19.1	29.5	.....	.....	106	.....	.....	.....	3	.....	1	.....	49	5	5	.....
	Pittsburgh	156,381	62	20.7	152,290	4,091	60	2	20.5	26.1	.....	.....	25	.....	.....	.....	8	.....	4	.....	5	.....	.....	.....
	Erie	27,730	10	18.8	27,499	231	10	.....	18.9	.....	.....	.....	2	.....	.....	.....	1	.....	1	.....	2	.....	.....	.....
	Reading	43,280	13	15.7	42,926	354	12	1	14.6	147.3	.....	.....	3	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
Del.	Wilmington	42,499	18	22.1	37,023	5,476	12	6	17.0	57.1	.....	.....	1	1	.....	.....	2	.....	.....	.....	2	.....	.....	.....
D. C.	Dist. of Col.	180,000	57	16.5	120,000	60,000	34	23	14.7	19.9	.....	.....	5	8	.....	.....	6	1	1	.....	6	10	.....	.....
Va.	Norfolk	21,966	10	23.7	11,933	10,033	5	5	22.1	25.7	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Richmond	63,803	27	22.1	35,756	28,047	17	10	24.8	18.8	.....	.....	3	1	.....	.....	.....	1	1	.....	7	.....	.....	.....
	Lynchburg	15,959	7	22.9	7,484	8,475	2	5	13.9	31.6	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
W. Va.	Wheeling	31,266	9	14.7	30,551	715	9	.....	15.3	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....
S. C.	Charleston	49,999	46	48.0	22,713	27,286	17	29	39.6	55.1	.....	.....	7	17	.....	.....	.....	.....	1	.....	3	3	.....	.....
Ga.	Augusta	23,023	16	36.3	12,364	10,659	8	8	33.7	39.6	.....	.....	7	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
	Atlanta	37,421	13	17.9	21,086	16,335	5	8	12.2	25.5	.....	.....	1	3	.....	.....	.....	1	.....	.....	1	1	.....	.....
	Savannah	30,681	23	39.1	15,007	15,674	13	10	45.2	32.1	.....	.....	8	7	.....	.....	.....	1	.....	.....	1	2	.....	.....
	Rome	3,877	2	26.8	2,154	1,723	.....	2	.....	60.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Brunswick	2,891	.....	.....	1,445	1,446	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fla.	Jacksonville	5,653	6	57.4	3,095	2,468	5	1	86.0	21.1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....
	Key West	9,890	6	31.5	6,746	3,144	6	.....	46.4	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ala.	Mobile	31,205	16	26.7	16,837	14,368	9	7	27.7	25.4	.....	.....	3	2	.....	.....	.....	.....	.....	.....	1	3	.....	.....
	Selma	7,529	3	20.9	3,345	4,184	.....	3	.....	38.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Miss.	Columbus	5,519	.....	.....	1,933	3,586	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Natchez	7,058	5	36.8	3,421	3,637	1	4	15.1	57.6	.....	.....	1	1	.....	.....	1	.....	.....	.....	2	.....	.....	.....
	Vicksburg	11,814	5	22.1	5,975	5,839	1	4	9.0	36.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Shannon	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
La.	New Orleans	216,140	165	39.7	159,128	57,231	110	55	36.2	50.2	.....	.....	56	22	.....	.....	3	1	.....	.....	11	13	.....	.....
	Shreveport	11,017	10	47.4	3,739	7,276	4	6	55.6	43.4	.....	.....	1	4	.....	.....	.....	1	1	.....	.....	.....	.....	.....
	Baton Rouge	7,217	2	14.6	2,917	4,300	.....	2	.....	24.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tex.	San Antonio	20,561	17	43.7	17,525	3,036	14	3	41.9	51.5	.....	.....	4	2	.....	.....	.....	.....	.....	.....	1	2	.....	.....
	Austin	10,960	4	19.0	7,349	3,611	3	1	21.3	14.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Waco	7,296	5	35.6	4,716	2,580	2	3	22.1	60.6	.....	.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Marshall	5,622	1	9.2	2,836	2,786	.....	1	.....	27.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Ark.	Little Rock	13,185	10	39.6	8,636	4,549	7	3	42.7	34.2	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 28, 1881.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.													
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
		1				1						1		1						3								7		Portland	Me.
																												4		Concord	N. H.
1		7								1		9	1			4	1					1				1		69		Burlington	Vt.
		3										1		1								1				1		3		Boston	Mass.
						1						1																12		Cambridge	
						1																						1		Edgartown	
		1										1																8		New Bedford	
												1																4		Newburyport	
		1										1						1										2		Marblehead	
		1																										1		Plymouth	
												1														1		10		Fall River	
																												10		Lowell	
																												4		Lawrence	
3						1						2				1				1								9		Worcester	
		2																				1						3		Lynn	
																						1						2		Brockton	
		1						1																				2		Holyoke	
																														Bridgewater	
																														Milford	
																												3		Chicopee	
																												2		Fitchburg	
		1										1																2		Somerville	
		1								1				1														6		Springfield	
																												2		Spencer	
1																														Quincy	
																														Northampton	
												1																		Haverhill	
		2																										1		Gloucester	
												2																3		Chelsea	
																												2		Clinton	
																												2		Beverly	
																												3		Malden	
						2						3																7		Salem	
						1						1		1														2		Taunton	
																														Westboro'	
																												1		Woburn	
																												2		Weymouth	
																						1						1	1	Waltham	
																												1		Webster	
																												1		Westfield	
																														Brookline	
		1								2		4				2										1		15	1	Providence	R. I.
2		1										1		1		1												7		New Haven	Conn.
																												1		New Britain	
																												1		Waterbury	
																												3		Fairfield	
												1																1		Norwich	
23		31		3		2		12		40		48				25				16		6		15		2		233	11	New York	N. Y.
3		21	1					5		12		12		1	1	3				1		4		2		1		106	2	Brooklyn	
1				1																								2		Poughkeepsie	
																												2		Newburg	
								1				7				3		1										17		Rochester	
2												1		4						3				1				29		Buffalo	
																												1		Watertown	
																														Cambridge	
												1																1		Seneca Falls	
										3																		3		Utica	
										1																				Port Jervis	
												1																		Peekskill	
1		1				1				1		4		1		1		1										32	2	Newark	N. J.
																										1		1		Orange	
										3																		4	3	Camden	
																												1		Plainfield	
																														Asbury Park	
1		7		1		9	1			20		15		1		8		1						27	2	7		145	10	Philadelphia	Pa.
3						3	1			8		2		2		1		2						2				20	1	Pittsburgh	
2																												4		Erie	
1										1				1	1													7		Reading	
																								2	3			6	5	Wilmington	Del.
1						2		1	1	1		1						1										15	10	Dist. of Columbia	D. C.
									1	1					1													4	2	Norfolk	Va.
												1														1		8	8	Richmond	
		1																										1	4	Lynchburg	
																												6		Wheeling	W. Va.
1	3					1	1			4	5																	7	15	Charleston	S. C.
5	1											1	1															2	5	Augusta	Ga.
						1							1															3	5	Atlanta	
3		1				1		1																				6	7	Savannah	
																						1							1	Rome	
																														Brunswick	
2																												2		Jacksonville	Fla.
1																				2								3		Key West	
	2											2																5	4	Mobile	Ala.
1																												1		Selma	
																														Columbus	Miss.
																					1							1		Natchez	
																	1											1	3	Vicksburg	
																														Shannon	
34	10	2						2	1	6	3	2				1				1								50	25	New Orleans	La.
										1	1	1																2	3	Shreveport	
																													2	Baton Rouge	
4						1																						7	2	San Antonio	Tex.
2																												1		Austin	
2	1																				1		1							Waco	
																														Marshall	
1										2											1							4	1	Little Rock	Ark.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 28, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Tenn ..	Nashville	43,461	22	26.4	27,004	16,457	13	9	25.1	28.9	.....	.....	5	2	.....	.....	.....	1	1	.....	1	2	.....	.....
	Memphis	33,593	25	38.8	18,622	14,971	13	12	36.3	41.5	.....	.....	5	4	.....	.....	.....	2	2	.....	1	3	.....	1
	Clarksville	3,860	1	13.5	2,134	1,726	1	.....	24.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Murfreesboro'	3,800	1	13.6	1,777	2,023	1	.....	29.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Trenton	1,400	.....	.....	828	555	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Franklin	2,466	2	42.3	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Ky	Louisville	123,645	49	20.9	102,842	20,920	35	14	17.8	34.9	.....	.....	8	8	.....	.....	1	.....	3	.....	7	3	.....	.....
	Bowling Green	5,111	1	10.2	3,254	1,857	1	.....	16.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio ...	Cincinnati	255,708	95	19.4	247,538	8,170	90	5	19.0	32.4	.....	.....	40	.....	.....	.....	6	.....	4	.....	13	1	.....	.....
	Cleveland	160,140	52	17.0	158,094	2,048	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	.....	.....	.....
	Gallipolis	4,400	1	11.8	3,474	926	1	.....	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dayton	38,677	8	10.7	37,684	993	8	.....	11.0	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Portsmouth	11,314	2	9.2	10,340	968	1	1	5.2	54.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Ind	Indianapolis	75,074	28	19.5	68,558	6,516	23	5	17.6	40.0	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	3	2	1	.....
	Richmond	12,743	3	12.3	12,106	637	3	.....	13.0	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	Evansville	29,280	10	17.8	26,563	2,717	6	4	11.7	76.8	.....	.....	2	.....	.....	.....	1	.....	1	1	1	1	.....	.....
Ill	Chicago	503,304	266	27.6	496,620	6,684	.....	.....	.....	.....	.....	.....	137	.....	.....	.....	10	.....	14	.....	22	.....	9	.....
	Peoria	29,315	8	16.2	28,821	494	8	.....	14.5	.....	.....	.....	5	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....
	Aurora	11,825	2	8.8	11,612	213	2	.....	8.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Jacksonville	10,927	2	9.5	10,222	705	2	.....	10.3	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Elgin	8,789	2	11.9	8,647	142	2	.....	12.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Moline	7,805	3	20.0	7,673	132	3	.....	20.4	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Rock Island	11,660	9	39.3	11,473	187	9	.....	39.7	.....	.....	.....	6	.....	.....	.....	.....	.....	4	.....	1	.....	.....	.....
	Lake	18,396	9	25.5	18,385	11	9	.....	25.5	.....	.....	.....	7	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Wis ..	Milwaukee	115,578	66	29.6	115,275	303	65	1	29.4	172.2	.....	.....	36	.....	.....	.....	3	.....	11	.....	6	.....	.....	.....
	Beloit	4,790	2	21.6	4,696	94	2	.....	21.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Mich ..	East Saginaw	19,016	5	13.6	18,832	184	5	.....	13.7	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Flint	8,410	2	12.4	8,163	247	2	.....	12.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Iowa ..	Dubuque	22,254	7	17.4	22,106	148	7	.....	17.4	.....	.....	.....	4	.....	.....	.....	3	.....	1	.....	2	.....	.....	.....
	Keokuk	12,117	1	4.3	11,066	1,051	1	.....	4.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo	Saint Louis	350,522	102	15.2	328,232	22,290	92	10	14.3	23.7	.....	.....	36	3	.....	.....	7	.....	7	1	12	3	1	.....
	Kansas City	55,813	13	12.2	47,637	8,176	10	3	10.9	19.1	.....	.....	2	2	.....	.....	.....	.....	.....	.....	2	1	.....	.....
Nebr ..	Omaha	30,518	3	5.1	29,680	838	3	.....	5.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kans ..	Lawrence	8,511	2	12.3	6,515	1,996	1	1	8.0	26.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ..	Salt Lake City	20,768	7	17.6	20,591	177	7	.....	17.7	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cal	San Francisco	233,956	87	19.4	210,515	23,441	75	12	18.5	27.1	.....	.....	27	.....	.....	.....	7	.....	.....	.....	5	1	1	.....
	Vallejo	6,587	1	7.9	6,303	204	1	.....	8.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Los Angeles	11,311	6	27.7	10,498	813	6	.....	29.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
		7,930,047	3,275	21.3	.....	.....	.....	.....	.....	.....	.....	.....	1,151	106	.....	.....	134	9	87	6	436	61	51	1

ABSTRACTS FROM CONSULAR REPORTS.

ALGIERS.—The report of United States Commercial Agent A. Jourdan covers the five weeks ending April 3. During this period 308 deaths were reported, giving an average annual death-rate of 47.2 per 1,000, the population being estimated at 68,055. The only contagious disease noted is typhoid fever, from which five deaths occurred. Among other causes were: pneumonia, 36; bronchitis, 14; croup, 27; consumption, 48; diphtheria, 2; and diarrhœa, 24. The large comparative mortality from diseases of the respiratory organs is ascribed to the fact that many persons already far advanced in chronic diseases of that kind seek Algiers as a sanitarium only to die there.

CONSTANTINOPLE.—The following extracts are made from the telegrams of Dr. Zitterer with regard to the plague in Mesopotamia:

1. *April* 29.—The plague has spread from Chafieh to a neighboring village of 60 inhabitants; 6 cases and 5 deaths occurred before the huts were burned and the people put into camp.

In Nedjeff some 3,000 people remained after the evacuation; of these 80 died April 24, and 50 April 25.

2. *May* 8.—The whole population within the *cordons* is estimated at 14,000. The plague has ceased at Djaara and vicinity. News from Karbella and other points indicate a decline of the disease. Mortality in Nedjeff has averaged 56 per day from April 26 to May 2. The forced evacuation of Nedjeff, with thorough disinfection before the return of the people, are strongly urged, as also the exclusion of all pilgrims till these measures shall be carried out.

A dispatch from Alexandria, of May 17, officially denies the report of a case of plague in Egypt.

GHENT, BELGIUM.—United States Consul A. Lefebvre reports, for the month of April, two deaths from small-pox, 8 from typhoid fever, 3 from scarlet fever, and 3 from diphtheria. Total deaths, 325; population, 134,852; annual death-rate, 29.3 per 1,000. From non-contagious diseases, there were 54 deaths from consumption, 51 from other lung diseases, 42 from heart diseases, and 56 from diarrhœal diseases.

NASSAU, BAHAMAS.—United States Consul T. J. McLain, jr., reports for the first two weeks of May that no contagious or epidemic disease has appeared on the island.

QUEENSTOWN, IRELAND.—In his report for the week ending May 14, United States Consul E. P. Brooks observes that three cases of small-pox are in the receiving hospital, coming from Philadelphia "in return for the compliment of two cases developed *en voyage* from London to Philadelphia, via Queenstown."

SAMOAN ISLANDS.—The reports of United States Consul T. M. Dawson for the month of February indicate a good sanitary condition in the port of Apia, and no contagious disease is reported.

SINGAPORE.—Reports from United States Consul A. G. Studer, to April 18, show that this town and district continue free from contagious or epidemic diseases.

TASMANIA.—United States Consul A. G. Webster sends reports for December, 1880, and the first two months of 1881. During the three months there were 168 deaths in Hobart, having a population of 27,500. Annual death-rate, 24.8 per 1,000. No complete records are kept, but cholera, yellow fever, small-pox, and plague are believed to be unknown in Tasmania.

TUXPAN, MEXICO.—Dr. A. M. Boyd, under date of May 3, reports 15 deaths during the month of April. Of these, 8 were from malarial fevers and 2 from consumption. Annual death-rate, 25.0 per 1,000.

VALPARAISO, CHILI.—United States Consul L. H. Foote reports for the month of March 69 deaths from lung diseases, 142 from fevers, 41 from consumption, and 430 from all causes. Population, 101,088; annual death-rate, 50.0 per 1,000.

For the month of April, 31 deaths from consumption, 68 from other lung diseases, and 91 from fevers. No contagious disease is reported. Total deaths, 408; population, 101,088; annual death-rate, 49.1 per 1,000.

VERA CRUZ, MEXICO.—United States Consul S. T. Trowbridge, in his report for the week ending May 8, states that the new city administration refuse to publish the daily and weekly reports of mortality in the city, so that in future only monthly reports can be furnished.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING MAY 28, 1881—Continued.

Diarrheal diseases.		Diphtheria.		Erysipelas.		FEVER. Typhoid.		Malarial.		Scarlet.		ACUTE LUNG DISEASES. Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.		Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
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145	21	116	3	12	....	48	4	34	4	122	9	173	11	22	3	67	3	7	....	44	3	29	2	64	6	20	2	1,323	171		

The following reports for the week ending May 28, 1881, are from places in which burial permits are not required:

Allegheny, Pa., 79,000; deaths, 14: under 5 years, 9; cerebro-spinal meningitis 1, consumption 2, scarlet fever 1, measles 1. **Bath, Me.**, 8,000; deaths, 3; under 5 years, 1; measles 1. **Belfast**, Me., 5,308; deaths, 2; consumption 2. **Brattleborough**, Vt., 6,000; death, 1. **Bucyrus**, Ohio, 3,950; deaths, 2; under 5 years, 1; pneumonia 1. **Calais, Me.**, 6,172; deaths, 4; under 5 years, 2; consumption 1. **Carrollton, Miss.**, 600; no deaths. **Chillicothe**, Ohio, 11,000; deaths, 3; under 5 years, 2; consumption 1, scarlet fever 2. **Coldwater, Mich.**, 4,990; deaths, 2; accidents 2. **Clinton**, Mich., 1,200; no deaths. **Columbus, Ga.**, 10,000; deaths, 3; under 5 years, 1; consumption 1, diarrhœa 1. **Corinth, Miss.**, 2,264; no deaths. **Crystal Springs, Miss.**, 955; no deaths. **Dallas, Tex.**, 13,327; deaths, 4; under 5 years, 4; diarrhœa 2. **Decatur. Miss.**, 1,000; no deaths. **Fayette, Miss.**, 400; no deaths. **Greenville, S. C.**, 6,159; death, 1; consumption 1. **Helena, Mont.**, 3,630; deaths, 2; under 5 years, 1; diphtheria 1, pneumonia 1. **Hernando, Miss.**, 1,000; deaths, 3; erysipelas 2, malarial fever 1. **Huntingdon, Tenn.**, 1,200; no deaths. **Huntingdon, Pa.**, 4,500; deaths, 2. **Indianola, Tex.**, 900; no deaths. **Iuka, Miss.**, 816; no deaths. **Jefferson, Tex.**, 3,250; deaths, 2; cerebro-spinal meningitis 1, measles 1. **Kenosha, Wis.**, 5,500; death, 1. **La Salle, Ill.**, 8,885; deaths, 2; under 5 years, 2; diphtheria 1, cerebro-spinal meningitis 1. **Louisiana, Mo.**, 5,000; death, 1; under 5 years, 1; accident 1. **Madison, Ind.**, 9,009; death, 1; cerebro-spinal meningitis 1. **Martinsburg, W. Va.**, 6,384; deaths, 3; under 5 years, 1. **Meridian, Miss.**, 4,013; deaths, 4; consumption 1, diarrhœa 1. **Milford, Mich.**, 1,400; deaths, 2. **Milledgeville, Ga.**, 3,000; no deaths. **Minneapolis, Minn.**, 46,887; deaths, 19; under 5 years, 8; consumption 3, diphtheria 1, scarlet fever 2, puerperal 1. **Muscatine, Iowa**, 8,412; no deaths. **Muskegon, Mich.**, 11,300; deaths, 4; accident 1, cerebro-spinal meningitis 1, puerperal 1. **Painesville**, Ohio, 5,504; death, 1; congestion of lungs 1. **Pass Christian, Miss.**, 3,000; no deaths. **Pearlington, Miss.**, 1,200; death, 1. **Pleasant Hill, Miss.**, 253; no deaths. **Port Gibson, Miss.**, 1,200; death, 1; diarrhœa 1. **Port Royal, S. C.**, 750; no deaths. **Raymond, Miss**, 500; no deaths. **Rensselaer, Ind.**, 900; no deaths. **Santa Cruz, Cal.**, 5,000; death, 1. **Senatobia, Miss.**, 935; no deaths. **Starkville, Miss.**, 1,454; deaths, 2; measles 1. **Tampa, Fla.**, 740; death, 1. **Titusville, Pa.**, 9,046; death, 1. **Winchester, Va.**, 5,000; deaths, 2; under 5 years, 2; scarlet fever 2. **Youngstown, Ohio**, 15,421; death, 1; pneumonia 1. Total population, 336,446; deaths under 5 years, 33; total number of deaths, 96; annual rate per 1,000, 14.9.

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NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

NATIONAL BOARD OF HEALTH rooms are at 1410 G street, northwest.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Canada	Kingston	15,000	May 21	5	16.0													53.3
Do	do	15,000	May 28	3	9.8													63.4
Bermuda	Hamilton	14,867	May 31	1	3.5													75.4
Cuba	Havana	195,437	May 21	155	41.4			3		24		13						80
Hayti	Port-au-Prince	30,000	May 11	16	27.8													87
Do	do	30,000	May 18	8	14.0													88
Do	Aux Cayes	9,000	May 7	4	23.2													80
Do	do	9,000	May 14	5	29.0													79
Do	Cape Haytien	10,000	May 7	7	27.8													
Do	do	10,000	May 14	8	34.9													
Do	do	10,000	May 21	3	20.9													
St. Domingo	San Domingo	10,000	Apr. 24	4	26.1													85
Do	do	10,000	May 1	9	58.7													85
Do	do	10,000	May 8	9	58.7						4							85
Do	do	10,000	May 15	5	32.6						1							84
West Indies	Turk's and Caicos Islds	4,749	Apr. 30	2	21.8													84
Do	do	4,749	May 7	2	21.8													80
Do	do	4,749	May 14	1	10.9													81
Do	do	4,749	May 21	1	10.9													82
Do	do	4,749	May 28	2	21.8													83
Guadeloupe	Point-a-Pitre	22,919	Apr. 23	17	38.7			23	4									
Do	do	22,919	Apr. 29	17	38.7			9	4									
Do	do	22,919	May 7	23	52.4													
U. S. of Colombia	Colon, Aspinwall	3,000	May 21	4	68.9													86
Do	do	3,000	May 28	3	51.7													86
Brazil	Rio de Janeiro	330,000	May 7	202	31.9				6		6						7	
Teneriffe	Santa Cruz	16,610	Apr. 30	9	28.3							1				5		66.3
Do	do	16,610	May 7	4	12.6					1		1				4		66.7
Scotland	Glasgow	601,266	May 14	257	26.7								10				24	50.9
Do	Leith	59,958	May 14	21	24.9												3	50.4
Do	do	59,958	May 21	32	27.8												2	49.3
England	London	3,707,130	May 14	1,427	20.1						69		8		1		153	50.7
Do	Liverpool	549,843	May 21	269	25.5					1		2	2	13	6	28	24	51.3
Do	Sheffield	284,403	May 21	120	22.0													52.3
Do	Tunstall	29,673	May 21	10	17.5												1	52.3
Do	Bradford	197,196	May 14	75	21.4												7	
Wales	Cardiff	83,389	May 21	31	19.3												7	53.3
France	Paris	1,988,806	May 21	1,102	28.8						29		34				86	
Do	Havre	92,068	May 14	61	34.5													51.8
Do	Lyons	342,815	Apr. 30	158	24.0						13		3				9	
Do	do	342,815	May 7	166	25.3						3				1		7	
Do	Rouen	104,209	May 21	78	33.9													
Holland	Amsterdam	316,952	May 14	176	29.0								1				8	50
Germany	Berlin	1,123,571	May 7	515	23.8					15		19	4	3		119	67	54.9
Do	Breslau	273,000	May 7	166	31.7								1				15	54.6
Do	Bremen	112,200	May 7	60	27.9						1						13	
Do	Barmen	95,000	May 14	40	21.9												3	58.5
Do	Cologne	144,750	May 14	81	29.1												8	
Do	Frankfort	137,000	May 14	58	22.5												1	58.1
Do	Hamburg	400,000	Apr. 30	228	29.7										2		8	
Do	Mannheim	53,500	May 21	22	21.5													59.3
Bavaria	Munich	230,000	May 14	158	35.8						1		2				13	
Saxony	Dresden	220,216	May 14	87	20.5							1	1			8	8	46.0
Do	Leipsic	151,616	May 14	53	18.1													46.4
Do	Chemnitz	95,135	May 7	61	33.4												2	58
Belgium	Brussels	401,745	May 14	191	24.7								1				9	74.1
Do	Antwerp	178,932	May 7	80	23.3					10	6	14	2					
Do	do	178,932	May 14	77	22.4					14	2	11	3					
Denmark	Copenhagen	235,254	Apr. 26	112	24.9							6				13		40.0
Do	do	235,254	May 3	142	31.5							5				13		42.6
Do	do	235,254	May 10	89	19.8							6				17		46.5
Austria	Vienna	730,911	May 14	456	32.5						14		1				22	47.6
Do	Trieste	128,295	Apr. 16	99	40.2						1						5	
Do	do	128,295	Apr. 23	89	44.3												6	
Do	do	128,295	Apr. 30	77	31.3						1						5	
Do	do	128,295	May 7	78	35.4						1						5	
Roumania	Bucharest	177,646	May 14	97	28.5						1		2				7	
Bohemia	Prague	260,805	Apr. 16	173	34.6						4						9	
Russian Poland	Warsaw	379,763	May 7	200	27.4													61.2
Sweden	Stockholm	173,433	May 7	98	30.4												9	38.0
Norway	Christiania	120,000	May 7	42	18.2							2				8	2	40.1
Spain	Cadiz	65,028	May 7	34	27.2													72
Do	Malaga	115,882	May 8	80	36.0												2	72.3
Do	do	115,882	May 15	79	35.6						1							72
Do	Seville	138,000	May 8	73	27.6								3				21	71.6
Do	do	138,000	May 15	68	26.7										2		26	69.8
Barbary	Tripoli	20,000	May 14	10	26.1													73.6
Cape Colony	Cape Town	35,000	May 2	24	20.9													70
Egypt	Alexandria	220,000	May 7	139	33.0													
Do	do	220,000	May 14	136	32.2													
East India	Calcutta	429,535	Apr. 23	298	36.2		81				9		13				3	82.3

TABLE OF DISTRIBUTION OF DISEASES IN THE UNITED STATES—Continued.

Sections.	Croup.			Scarlet fever.			Diarrhœal diseases.			Enteric fever.			Measles.			Whooping-cough.			Malarial fevers.			Small-pox.
	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.	Annual rate per 1,000.	Per cent. of deaths.	Number of deaths.
Northeast	159	0.41	1.81	412	1.07	4.68	183	0.47	2.08	121	0.31	1.37	92	0.24	1.64	44	0.11	0.50	80	0.21	0.91	49
Southeast	7	0.08	0.30	81	0.95	3.48	270	3.16	11.46	38	0.44	1.61	39	0.45	1.65	8	0.04	0.34	38	0.44	1.61	6
Northwest	49	0.35	1.66	64	0.45	2.17	196	1.38	6.65	50	0.35	1.70	71	0.40	2.41	25	0.17	0.85	33	0.23	1.12	14

Distribution of diseases.—In the Northeast section the greatest reduction of general mortality is observed, the rate having fallen from 25.64 to 22.96 per 1,000. This improvement is evidently due chiefly to the less mortality from pulmonary diseases, though the zymotic diseases also show a tendency to decline. Diarrhœal diseases have advanced from 0.29 to 0.47, or 18 per cent.

Southeast section.—Here the pulmonary affections show nearly the same rate of decline (25 per cent.) as in the Northeast, and the rise of the general death-rate from 27.46 to 27.59 is to be ascribed to the increase of diarrhœal diseases, which have advanced from 0.85 to 3.16 per 1,000. The other zymotics show a considerable decline, enteric fever alone having slightly increased.

Northwest section.—In these States cerebro-spinal meningitis, which causes only 0.45 deaths per 1,000 in the other sections, rises to 1.53, the distribution seeming to be very general, and the mortality in proportion to the populations represented. The fall of the general mortality from a rate of 22.30 to 20.84 per 1,000 is due to the decline in consumption and lung diseases, as in other sections; this section also shows a general reduction in the contagious diseases, but diarrhœal diseases have advanced from 0.53 to 1.38 per 1,000. During the month of May 312 deaths from small-pox were reported from 20 different places, showing a wide distribution of the disease. In New York City it seems to be increasing steadily, while it is declining in Philadelphia, probably from exhaustion of material. The deaths reported are distributed as follows: New Haven, Conn., 1; New York, 66; Brooklyn, 5; Buffalo, N. Y., 1; Hudson County, N. J., 11; Camden, N. J., 3; Philadelphia, 122; Pittsburgh, Pa., 7; Wilmington, Del., 32; District of Columbia, 1; Richmond, Va., 2; New Orleans, 1; Louisville, Ky., 2; Cincinnati, Ohio, 3; Evansville, Ind., 1, Chicago, 43; Lake, Ill., 2; Peoria, Ill., 1; Kansas City, Mo., 2; San Francisco, 6.

The subjoined Circular No. 7 is reprinted. Further rules may be added from time to time as experience may suggest to be necessary and proper.

CIRCULAR No. 7.

The following rules govern the action of the National Board of Health at present in aiding State and local boards to enforce regulations of such boards preventing the introduction of contagious and infectious diseases into the United States, or into any one State from another:

1. The regulations to be enforced are those of State and local boards, whether adopted at the recommendation of the National Board or otherwise, and not those of the National Board. The National Board has recommended certain regulations for adoption by State and local boards. Up to the present time these recommendations have been adopted by the following boards, viz:

The State boards of Arkansas, Illinois, Kentucky, Louisiana, Mississippi, New Jersey, North Carolina, and Tennessee; the local boards of Brunswick, Ga., Brownsville, Tex., Bayou Sara, La., Cairo, Ill., Carlinville, Ill., Decatur, Ala., Delhi, La., Fernandina, Fla., Huntingdon, Tenn., Jacksonville, Fla., Lauderdale County, Mississippi, Meridian, Miss., Mobile, Ala., Pensacola, Fla., Shelbyville, Tenn., Saint Louis, Mo., Tampa, Fla., Vicksburg, Miss.

The regulations of the above-named boards are therefore to a certain extent uniform, and approved by the National Board, and therefore are such as it will aid in enforcing when necessary.

State and local boards which have not adopted the recommendations of the National Board are requested to do so as soon as convenient, in order to secure uniformity of action.

It should be observed that these recommendations are for a minimum amount of precaution, and therefore that additional precautions may be taken by State and local boards if deemed necessary, it being borne in mind all the while that the end in view is to secure or restore the public health by measures which interfere with travel or traffic as little as possible; in other words, to render commerce secure; and (with rare exceptions) *not to put an end to, or even suspend it.* In this connection it is proper to add that non-intercourse quarantines, especially by *local* authorities, are not approved by this Board.

2. Applications to the National Board of Health for aid should be made by or through the State board, or in case there is no State board, then by or through the governor of the State.

3. Applications for aid should give *details* of what is required, and the estimated cost for each item. Among other things should be specified the duties and powers of the officers whose appointment or payment is requested.

4. The application should be accompanied by an official certificate from the governor of the State or the mayor or other chief officer of the municipality, respectively, to the effect that there are no State or municipal funds available to carry out the particular sanitary measures because of which the application is made. Official information should be given therein of the adoption by such State or local board of any rules and regulations that have been recommended in such case by this Board, and of any other State or local rules and regulations that appear to be necessary for the purpose in question.

5. Of the supplies required for the sick those furnished by this Board to local authorities shall, as a general rule, be applied to other objects than those of shelter and furniture, which should be furnished by such authorities. Where, however, it shall be otherwise ordered the local authorities will be expected to account to this Board from time to time for the safe-keeping and proper use of the furniture, provisions, medicines, &c., so furnished.

6. Whenever this Board shall order the erection of temporary buildings, or provide any buildings for the purpose of quarantine, the necessary contracts therefor shall be made by one of its own officers or agents, subject to the approval of the board or of its executive committee.

7. Care should be taken that the officers to be paid from funds furnished by the National Board are employed only in such number and for such time as there is actual need of their services. The National Board of Health reserves the right of judging from time to time, by means of reports received from its own agents, whether such need exists.

8. Funds are not furnished by the Treasury to State or local boards. They are placed in the hands of the disbursing clerk of the National Board of Health, by whom bills, properly certified and approved, will be paid by check on Washington or New York. All bills must be in accordance with the estimates as approved by the Secretary of the Treasury, must be made out in duplicate on forms furnished by the National Board, and be *certified*, as to their correctness, by some authorized officer of the State board or by the governor of the State, and must be approved by some member or special inspector of the National Board duly authorized. All bills for services rendered or for articles furnished local or State boards must be sworn to by the person rendering the service or furnishing the articles.

The names of all persons whose services as inspectors, &c., are to be paid for out of its funds must previously to their appointment be submitted to and approved by the National Board.

It is expected that at the close of the season a full report will be made by State boards of health to the National Board as to their operations in carrying out those rules and regulations for the prevention of the spread of yellow fever in which the National Board has rendered aid and co-operation, and it is desired that copies of all orders issued from time to time to inspectors shall be promptly furnished to this Board.

It is to be remembered that a full account of its expenditures must be made by the National Board of Health to Congress, and that such account ought to set forth these expenditures in detail, and exhibit their propriety and necessity.

It is therefore essential that State and municipal boards shall cooperate with the National Board in supplying material for such an account, and it is earnestly desired that they will preserve and furnish due evidence of the propriety of each item of their expenditure for both persons employed and articles purchased with the funds in question; particularly as the future aid of both State and National Boards must depend largely upon the record for efficiency and economy made during the year now current.

9. State and municipal boards of health which receive aid from this Board are requested to furnish weekly reports to this office of their operations, including copies of orders issued by them and of reports made to them by their quarantine and sanitary inspectors with reference to the occurrence of cases of yellow fever or other contagious diseases, and to measures adopted for isolating such cases; such reports to be presented in a form suitable for publication in the BULLETIN.

ABSTRACTS FROM CONSULAR REPORTS.

CONSTANTINOPLE.—United States Consul G. H. Heap forwards telegrams from Mesopotamia to May 24. No important changes are reported in the infected district, but the plague is gradually subsiding. The rules of quarantine are not relaxed, and active measures of cleaning and disinfection are enforced in the villages and towns evacuated during the pestilence.

NAPLES, ITALY.—United States Consul E. H. Smith, under date of May 25, states that the board of health at Naples has determined to change the form of their weekly and monthly reports of mortality. In the form now adopted only the deaths are given; cases of disease not fatal are not recorded.

SMYRNA.—United States Consul B. A. Duncan, under date of May 2, informs the Department of State that the Russian Government has issued orders to quarantine for ten days all vessels arriving at any Russian port from the Levant, unless furnished with certificates from the Russian consuls of the absence of contagious disease at the port of departure and other ports visited during the voyage. Some doubt is expressed as to the limitation of the plague in Mesopotamia by the *cordons*, and neighboring countries are afraid of the extension of the disease by caravans and pilgrims, which are the principal agents in spreading contagion in the East.

SAGUA LA GRANDE, CUBA.—Under date of June 8, United States Commercial Agent J. F. Swords reports that during the past week 3 deaths from yellow fever had occurred. All of the victims were resident less than five years in the island.

The harbor and shipping are free from contagious diseases.

REPORTS OF CORRESPONDENTS OF THE NATIONAL BOARD OF HEALTH.

HAVANA, CUBA.—The report for the week ending June 3 shows only 1 death from yellow fever. Small-pox caused 26 deaths, and 3 were from typhoid fever. During the month of May there were 6 deaths from yellow fever, 120 from small-pox, and 42 from typhoid fever. On board of the British steamship *Nankin*, which arrived at Havana June 3, *en route* for New York, a second-cabin passenger was found sick with fever of a suspicious character and having albuminous urine. The patient was removed to hospital, the room was disinfected, and the bedding, &c., destroyed.

During the week ending June 10, there were 7 deaths from yellow fever, of which 5 were in the military hospitals. Small-pox caused 25 deaths and 7 were from typhoid fever.

The Spanish bark *Angela* sailed for Mobile June 10 without a bill of health. It is believed that yellow fever occurred on board of this vessel in July, 1880, while at Havana.

The American bark *Moonbeam* also sailed for Searsport without bill of health, and the refusal to take one is always to be considered suspicious.

SHELBYVILLE, TENN.—Under date of June 11, Dr. C. Fite reports two cases of cerebro-spinal meningitis occurring in one house. The house was in a filthy condition and the two children attacked had recently recovered from measles. Both were taken sick on the same day; one died and the other is convalescent.

Dr. Fite, who is secretary of the local board of health, observes that increased interest in sanitary work and a more general appreciation of its value by the people are to be noted in most parts of the country.

REPORTS FROM HOSPITALS IN THE UNITED STATES FOR THE MONTH ENDING MAY 28, 1881.

Name of hospital.	Place.	Character of hospital.	Number of beds.	Patients at last report.	Consumption.				Croup.				Diarrhœal diseases.				Diphtheria.				Fever, enteric.				Fever, malarial.			
					Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Albany Hospital	Albany, N. Y	General	150	48	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
German Hospital	New York, N. Y	do	100	82	5	4	1	11	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
City Hospital	Rochester, N. Y	do	125	79	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Saint Mary's Hospital	do	do	320	209	2	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	..	..
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	13	9	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
Saint Michael's Hospital	Newark, N. J	do	150	151	7	5	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	6	9	..	6
Jewish Hospital	Philadelphia, Pa	do	40	19	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..
Freedmen's Hospital	Washington, D. C	do	300	221	6	..	4	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	7	..	..	..
Saint Luke's Hospital	Detroit, Mich	do	25	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
German Hospital	San Francisco, Cal	do	150	67	1	..	..	1	..	..	..	..	1	1	..	..	..	..	..	..	1	2	1	1	3	3	..	2
Naval Hospital	Chelsea, Mass	do	100	24	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do	Brooklyn, N. Y	do	115	48	3	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Do	Mare Island, Cal	do	77	28	..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New York City Lunatic Asylum	Blackwell's Island, N. Y	Insane	....	1372	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willard Asylum	Willard, N. Y	do	....	1709	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
State Hospital for Insane	Danville, Pa	do	250	197	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Lunatic Asylum	Williamsburg, Va	do	368	335	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Michigan Lunatic Asylum	Kalamazoo, Mich	do	700	680	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Insane Asylum of California	Stockton, Cal	do	1098	1098	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Name of hospital.	Place.	Character of hospital.	Fever, scarlet.				Lung diseases, acute.				Measles.				Puerperal diseases.				Small-pox.				Totals.			
			Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.	Admitted.	Discharged.	Died.	Remaining.
Albany Hospital	Albany, N. Y	General	..	..	..	..	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48	48	3	48
German Hospital	New York, N. Y	do	..	..	..	..	9	5	..	..	..	..	..	..	1	..	1	2	..	..	..	..	105	90	10	88
City Hospital	Rochester, N. Y	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32	36	3	72
Saint Mary's Hospital	do	do	..	..	..	..	2	1	..	..	..	..	..	..	3	5	..	..	..	..	..	..	35	30	2	..
Saint Barnabas Hospital	Poughkeepsie, N. Y	do	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	5	4	1	10
Saint Michael's Hospital	Newark, N. J	do	..	..	..	..	5	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	82	69	7	157
Jewish Hospital	Philadelphia, Pa	do	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	28	24	2	21
Freedmen's Hospital	Washington, D. C	do	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	8	..	..	..	..	66	51	10	226
Saint Luke's Hospital	Detroit, Mich	do	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	3	....	15
German Hospital	San Francisco, Cal	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37	44	3	57
Naval Hospital	Chelsea, Mass	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	2	....	15
Do	Brooklyn, N. Y	do	..	..	..	..	1	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	7	14	....	28
Do	Mare Island, Cal	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	....	2
New York City Lunatic Asylum	Blackwell's Island, N. Y	Insane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40	....	....	....
Willard Asylum	Willard, N. Y	do	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	22	5	12	1711
State Hospital for Insane	Danville, Pa	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	2	3	204
Eastern Lunatic Asylum	Williamsburg, Va	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	6	1	338
Michigan Lunatic Asylum	Kalamazoo, Mich	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	10	2	676
Insane Asylum of California	Stockton, Cal	do	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	6	9	1102

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 4, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	13	20.0	33,480	330	13	.....	20.2	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. H	Concord	13,838	3	11.2	13,771	67	3	.....	11.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Vt	Burlington	11,364	2	9.2	11,248	116	2	.....	9.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass	Boston	362,535	147	21.2	356,435	6,000	143	4	21.1	34.8	.....	.....	41	1	.....	.....	5	.....	.....	.....	35	.....
	Cambridge	52,740	20	19.6	51,222	1,518	20	.....	20.4	.....	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	3	.....
	Edgartown	1,301	.....	.....	1,238	63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	New Bedford	26,875	5	9.7	25,349	1,526	5	.....	10.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Newburyport	13,537	4	15.4	13,469	68	4	.....	15.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....
	Marblehead	7,467	1	7.0	7,456	11	1	.....	7.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Plymouth	7,094	2	14.7	6,930	164	2	.....	15.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fall River	49,006	19	20.2	48,846	160	19	.....	20.3	.....	.....	.....	10	.....	.....	.....	.....	.....	2	.....	2	.....
	Lawrence	39,178	5	6.7	39,026	152	5	.....	6.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lowell	59,485	14	12.3	59,307	178	14	.....	12.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	5	.....
	Pittsfield	13,367	5	19.5	13,047	320	5	.....	19.9	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
	Worcester	58,295	16	14.3	57,528	767	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
	Lynn	38,284	16	21.8	37,730	554	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	3	.....
	Brockton	13,608	7	26.8	13,569	39	7	.....	26.8	.....	.....	.....	3	.....	.....	.....	1	.....	.....	.....	.....	.....
	Holyoke	21,851	2	4.8	21,822	29	2	.....	4.8	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	1	.....
	Bridgewater	3,620	2	28.9	3,594	26	2	.....	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Milford	9,310	4	22.4	9,267	43	4	.....	22.4	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
	Chicopee	11,325	3	13.8	11,324	1	3	.....	13.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Fitchburg	12,405	2	8.4	12,368	37	2	.....	8.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Somerville	24,985	9	18.8	24,906	79	9	.....	13.8	.....	.....	.....	4	.....	.....	.....	.....	.....	1	.....	1	.....
	Springfield	33,340	11	17.2	32,592	748	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	5	.....
	Spencer	7,466	2	13.9	7,459	7	2	.....	13.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Quincy	10,529	5	24.8	10,438	91	5	.....	24.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Northampton	12,172	2	8.7	12,044	128	2	.....	8.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Haverhill	18,475	5	14.1	18,306	169	5	.....	14.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Gloucester	19,329	5	13.7	19,309	20	5	.....	13.7	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....
	Chelsea	21,785	4	9.5	21,253	532	4	.....	9.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clinton	8,030	1	6.5	8,019	11	1	.....	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Beverly	8,445	2	12.6	8,421	24	2	.....	12.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Attleborough	11,111	2	9.4	10,975	136	2	.....	9.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Malden	12,017	1	4.3	11,959	58	1	.....	4.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Salem	27,598	14	26.4	27,396	202	14	.....	26.4	.....	.....	.....	6	.....	.....	.....	1	.....	.....	.....	.....	.....
	Taunton	21,213	10	24.3	21,102	111	10	.....	24.3	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	2	.....
	Westboro'	5,214	3	29.9	5,178	36	3	.....	2.9	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....
	Woburn	10,938	3	14.3	10,901	37	3	.....	14.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
	Weymouth	10,571	2	9.9	10,521	50	2	.....	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Waltham	11,711	1	4.4	11,692	19	1	.....	4.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Webster	5,696	2	18.3	5,652	44	2	.....	18.3	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Westfield	7,587	5	33.9	7,525	62	5	.....	33.9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....
	Brookline	8,053	.....	.....	8,036	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Newton	16,995	5	15.1	16,780	215	5	.....	15.5	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
R. I	Providence	104,855	41	20.4	101,209	3,646	38	3	19.6	41.2	.....	.....	8	1	.....	.....	2	.....	1	.....	4	1
Conn	New Haven	62,882	21	17.4	60,654	2,228	19	2	16.3	45.9	.....	.....	4	1	.....	.....	1	.....	2	.....	2	1
	New Britain	13,978	5	18.7	13,903	75	5	.....	18.7	.....	.....	.....	3	.....	.....	.....	1	.....	.....	.....	1	.....
	Waterbury	20,269	4	14.3	20,117	152	4	.....	14.3	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....
	Fairfield	3,748	1	13.9	3,603	145	1	.....	14.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Norwich	21,141	8	19.4	20,579	562	8	.....	20.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....
N. Y	New York	1,206,577	660	28.5	1,186,144	20,433	645	15	28.3	38.3	.....	.....	271	.....	.....	.....	26	.....	12	.....	92	.....
	Brooklyn	566,689	216	19.9	558,474	8,215	211	5	19.7	31.7	.....	.....	85	1	.....	.....	8	.....	.....	.....	29	1
	Yonkers	18,892	5	13.8	18,528	364	5	.....	14.1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....
	Poughkeepsie	20,207	12	31.0	19,513	694	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	3	.....
	Rochester	89,363	33	19.3	88,843	518	33	.....	19.4	.....	.....	.....	10	.....	.....	.....	5	.....	1	.....	3	.....
	Buffalo	155,237	53	17.8	154,292	845	53	.....	17.9	.....	.....	.....	18	.....	.....	.....	3	.....	2	.....	8	.....
	Watertown	10,697	2	9.8	10,589	108	2	.....	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	Cambridge	1,850	.....	.....	1,800	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Seneca Falls	5,880	1	8.7	5,839	41	1	.....	8.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Utica	33,913	13	20.0	33,669	244	13	.....	20.1	.....	.....	.....	6	.....	.....	.....	1	.....	2	.....	1	.....
	Port Jervis	8,874	1	5.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Peekskill	7,009	4	29.5	.....	.....	3	1	.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	1
N. J	Newark	136,400	47	18.0	133,074	3,326	46	1	18.2	15.7	.....	.....	19	.....	.....	.....	.....	.....	.....	.....	7	.....
	Hudson Co	187,950	82	22.8	186,254	1,696	.....	.....	.....	.....	.....	.....	37	.....	.....	.....	4	.....	.....	.....	8	.....
	Orange	13,206	5	19.8	12,749	457	5	.....	19.2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....
	Camden	41,658	13	16.3	38,064	3,594	10	3	13.7	43.2	.....	.....	2	1	.....	.....	1	.....	.....	.....	1	2
	Plainfield	8,126	5	32.6	7,633	493	5	.....	34.1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
	Asbury Park	1,640	.....	.....	1,584	56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pa	Philadelphia	846,980	302	18.6	815,182	31,798	290	12	18.6	19.7	.....	.....	102	.....	.....	.....	6	.....	1	.....	47	.....
	Pittsburgh	156,381	68	22.7	152,290	4,091	62	6	21.1	78.2	.....	.....	22	5	.....	.....	6	.....	2	1	6	.....
	Erie	27,730	5	9.4	27,499	231	5	.....	9.4	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	2	.....
	Reading	43,280	21	25.3	42,926	354	20	1	24.4	147.3	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	1
Del	Wilmington	42,499	21	25.8	37,023	5,476	16	5	22.5	47.6	.....	.....	4	1	.....	.....	.....	.....	.....	.....	3	4
D. C	Dist. of Col	180,000	49	14.2	120,000	60,000	36	13	15.6	11.3	.....	.....	10	4	.....	.....	1	.....	.....	1	9	3
Va	Norfolk	21,966	7	16.6	11,933	10,033	1	6	4.4	30.8	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
	Richmond	63,803	28	22.9	35,756	28,047	10	18	14.6	33.8	.....	.....	4	4	.....	.....	.....	.....	.....	1	.....	6
W. Va	Wheeling	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. C	Charleston	49,999	47	49.0	22,713	27,286	9	38	21.1	72.2	.....	.....	3	19	.....	.....	.....	.....	.....	.....	.....	3
Ga	Augusta	23,023	11	24.9	12,364	10,659	4	7	16.8	34.6	.....	.....	3	5	.....	.....	.....	.....	.....	.....	.....	.....
	Atlanta	37,421	23	31.6	21,086	16,335	12	11	29.3	35.0	.....	.....	9	4	.....	.....	1	.....	.....	.....	1	2
	Savannah	30,681	13	22.1	15,007	15,674	6	7	20.9	22.5	.....	.....	1	3	.....	.....	1	1	.....	.....	1	1
	Rome	3,877	2	26.8	2,154	1,723	1	1	24.5	30.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
	Brunswick	2,891	2	36.0	1,445	1,446	.....	2	.....	73.8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Fla	Jacksonville	8,000	5	46.8	5,000	3,000	1	4	17.2	84.6	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	1
	Key West	9,890	9	47.5	6,746	3,144	5	4	38.6	66.0	.....	.....	4	2	.....	.....	.....	.....	.....	.....	.....	3
Ala	Mobile	31,205	17	28.4	16,837	14,368	8	9	24.7	32.5	.....	.....	3	7	.....	.....	.....	.....	.....	.....	.....	.....
Miss	Columbus	5,230	.....	.....	2,760	2,470	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Natchez	7,058	4	29.4	3,421	3,637	3	1	45.3	14.4	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....
	Vicksburg	11,814	8	35.3	5,975	5,839	4	4	35.9	36.0	.....	.....	3	2	.....	.....	.....	.....	2	.....	.....	.....
	Verona	1,000	1	52.2	650	350	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
La	New Orleans	216,359	168	40.4	159,128	57,231	105	63	34.6	56.5	.....	.....	53	24	.....	.....	1	1	.....	.....	9	6
	Shreveport	11,017	5	23.7	3,739	7,276	1	4	13.9	28.9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2
	Morgan City	2,015	.....	93.7	1,078	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Baton Rouge	7,217	9	65.3	2,917	4,300	4	5	71.6	61.6	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	1
Tex	San Antonio	20,561	17	43.7	17,525	3,036	15	2	44.8	34.4	.....	.....	7	2	.....	.....	2	.....	.....	.....	.....	.....
	Austin	10,960	9	42.8	7,349	3,611	8	1	56.7	14.6	.....	.....	6	1	.....	.....	.....	.....	.....	.....	1	.....

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 4, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Tex.	Waco	7,296	5	35.5	4,716	2,580	4	1	44.2	20.2	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Marshall	5,622	3	27.7	2,836	2,786	1	2	18.3	37.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dallas	10,358	6	30.2	.....	.....	6	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Ark.	Little Rock	13,185	7	27.7	8,636	4,549	4	3	24.4	34.2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....
Tenn.	Nashville	43,461	18	21.6	27,004	16,457	9	9	17.4	28.9	.....	.....	3	2	.....	.....	.....	.....	.....	.....	1	3	.....	.....
	Memphis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clarksville	7,250	2	27.0	4,000	3,250	2	.....	20.1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
	Murfreesboro'	3,800	1	13.6	1,777	2,023	1	.....	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Trenton	1,400	.....	.....	828	555	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky.	Louisville	123,645	31	13.1	102,842	20,920	19	12	9.6	29.9	.....	.....	3	5	.....	.....	2	.....	.....	2	4	3	.....	.....
	Bowling Green	5,111	.....	.....	3,254	1,857	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio	Cincinnati	255,708	99	20.2	247,538	8,170	94	5	19.8	32.4	.....	.....	47	.....	.....	.....	3	.....	4	.....	12	2	.....	.....
	Cleveland	160,140	60	19.6	158,094	2,048	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	5	.....	7	.....	1	.....
	Gallipolis	4,400	1	11.8	3,474	926	1	.....	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Dayton	38,677	9	12.1	37,684	993	8	1	11.0	54.3	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....
	Portsmouth	11,314	4	18.4	10,346	968	4	.....	20.8	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind.	Indianapolis	75,074	25	17.4	68,558	6,516	20	5	15.3	40.0	.....	.....	2	.....	.....	.....	1	.....	2	.....	.....	2	.....	.....
	Richmond	12,743	3	12.3	12,106	637	2	1	8.7	81.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Evansville	29,286	10	17.8	26,563	2,717	8	2	15.6	38.4	.....	.....	4	.....	.....	.....	1	.....	2	.....	1	1	.....	.....
Ill.	Chicago	503,304	208	21.5	496,620	6,684	.....	.....	.....	.....	.....	.....	106	.....	.....	.....	13	.....	13	.....	18	.....	7	.....
	Peoria	29,114	6	10.7	28,821	294	6	.....	10.8	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
	Aurora	11,825	1	4.4	11,612	213	1	.....	4.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Elgin	8,789	5	29.7	8,647	142	5	.....	30.0	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Moline	7,805	2	13.4	7,673	132	2	.....	13.6	.....	.....	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
	Rock Island	11,660	4	17.5	11,473	187	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Lake	18,396	9	25.5	18,385	11	9	.....	25.5	.....	2,704	3	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Wis.	Milwaukee	115,578	41	18.5	115,275	303	41	.....	18.6	.....	.....	.....	26	.....	.....	.....	2	.....	2	.....	4	.....	1	.....
	Beloit	4,790	1	10.8	4,696	94	1	.....	10.9	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn.	Minneapolis	46,887	17	18.9	.....	.....	17	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....
Mich.	East Saginaw	19,016	4	11.0	18,832	184	4	.....	11.0	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Flint	8,410	2	12.4	8,163	247	2	.....	12.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa	Dubuque	22,254	3	7.0	22,106	148	3	.....	7.0	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	Keokuk	12,117	3	12.9	11,066	1,051	3	.....	14.1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Davenport	21,834	3	7.2	21,604	230	3	.....	7.3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo.	Saint Louis	351,522	117	17.4	328,232	22,290	102	15	16.2	35.6	.....	.....	31	5	.....	.....	11	.....	11	.....	10	4	1	.....
	Kansas City	55,813	17	15.9	47,637	8,176	16	1	17.4	6.4	.....	.....	8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Nebr.	Omaha	30,518	6	10.3	29,680	838	6	.....	10.5	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Kans.	Lawrence	8,511	.....	.....	6,515	1,996	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo.	Boulder	3,069	1	17.0	3,024	45	1	.....	17.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah.	Salt Lake City	20,768	8	20.1	20,591	177	8	.....	20.2	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Cal.	San Francisco	233,956	88	19.6	210,515	23,441	77	11	19.0	24.6	.....	.....	27	.....	.....	.....	.....	.....	1	.....	14	.....	.....	.....
	Vallejo	6,587	4	31.6	6,303	284	4	.....	33.1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Los Angeles	11,311	3	13.8	10,498	813	3	.....	15.9	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....
		8,139,758	3,206	20.5	.....	.....	.....	.....	.....	.....	.....	.....	1,181	113	.....	.....	125	2	73	4	300	60	50	.....

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary matters, that any well-marked case of disease which may seem on medical grounds fairly attributable to orgauic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysis are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

TRUXILLO, HONDURAS.—Dr. W. L. Hammond, U. S. Army, under date of June 1, reports that the harbor and vicinity are free from contagious diseases, and clean bills of health are issued. Due precautions are taken by the local board of health to secure proper examination and inspection of vessels.

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NATIONAL BOARD OF HEALTH rooms, 1410 G st., N. W.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 4, 1881—Continued.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.													
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
1																				3	1									Waco	Tex.
	1																											1	1	Marshall	
3																												2		Dallas	
								1		1																		1	1	Little Rock	Ark.
	2									1																		7	4	Nashville	Tenn.
																														Memphis	
																														Clarksville	
																												1		Murfreesboro'	
																														Trenton	
								1					1											1				12	5	Louisville	Ky.
																														Bowling Green	
10		1		3		2				1		6		2		2				3						2		43	3	Cincinnati	Ohio.
4														4		1				3						2		31		Cleveland	
																														Gallipolis	
1		2				1																						2		Dayton	
																												4		Portsmouth	
1	1							1				1										1						13	2	Indianapolis	Ind.
																													1	Richmond	
						1											1					1						2		Evansville	
17		8		1		11		3		6		15		1		5				5				8		2		75		Chicago	Ill.
																												4		Peoria	
																												1		Aurora	
										3																		2		Elgin	
																												2		Moline	
																														Rock Island	
1		1								1		1												1				3		Lake	
		2								4		1				2				1								22		Milwaukee	Wis.
																												1		Beloit	
										5		2										1						6		Minneapolis	Minn.
1						1																						2		East Saginaw	Mich.
																												2		Flint	
										1																		1		Dubuque	Iowa.
1																												1		Keokuk	
												2	1																	Davenport	
4	1	2				1	1	3	2	1		1				1						1				1		54	7	Saint Louis	Mo.
4		1										1		1								1						7		Kansas City	
		1																				1						2		Omaha	Nebr.
																														Lawrence	Kans.
																												1		Boulder	Colo.
1		1										1																4		Salt Lake City	Utah.
5		1				1						4				1												50	9	San Francisco	Cal.
																										3		1		Vallejo	
								1																						Los Angeles	
164	39	122	3	18	....	47	5	32	4	122	4	169	16	19	3	56	4	....	....	47	5	33	1	64	6	15	2	1,441	154		

The following reports for the week ending June 4, 1881, are from places in which burial permits are not required:

Allegheny, Pa., 79,000; deaths, 25: under 5 years, 13; accidents 2; cerebro-spinal meningitis 2, consumption 2, typhoid fever 1, scarlet fever 3, pneumonia 2, bronchitis 1, puerperal 1. Bath, Me., 8,000; deaths, 5; under 5 years, 1; congestion of lungs 1, measles 1. Brattleborough, Vt., 6,000; no deaths. Calais, Me., 6,172; deaths, 3; accidents 1, diarrhœa 1. Carrollton, Miss., 600; no deaths. Clinton, Mich., 1,200; no deaths. Coldwater, Mich., 5,000; no deaths. Corinth, Miss., 2,264; no deaths. Crystal Springs, Miss., 955; no deaths. Decatur, Miss., 1,000; no deaths. Greenville, S. C., 6,500; deaths, 2; under 5 years, 1. Helena, Mont., 3,630; deaths, 1. Huntingdon, Pa., 4,500; deaths, 2; under 5 years, 1; accident 1. Huntingdon, Tenn., 1,200; deaths, 1; typhoid fever 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Kenosha, Wis., 5,500; deaths, 2; under 5 years, 2; croup 2. La Salle, Ill., 8,885; no deaths. Louisiana, Mo., 5,000; death, 1. Madison, Ind., 9,009; no deaths. Martinsburg, W. Va., 6,334; deaths, 3; consumption 1. Meridian, Miss., 4,013; deaths, 2; under 5 years, 1; measles 1. Milan, Tenn., 1,800; no deaths. Milford, Mich., 1,400; no deaths. Milledgeville, Ga., 3,000; deaths, 2; under 5 years, 1; diarrhœa 1. Muskegon, Mich., 11,300; deaths, 6; under 5 years, 1; consumption 1, measles 1, accident 3. Painesville, Ohio, 5,504; no deaths. Pass Christian, Miss., 3,000; no deaths. Pearlington, Miss., 1,200; deaths, 1. Pleasant Hill, Miss., 253; no deaths. Port Royal, S. C., 750; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; no deaths. Santa Cruz, Cal., 5,000; deaths, 2; puerperal 1. Shannon, Miss., 500; death, 1. Starkville, Miss., 1,454; no deaths. Tampa, Fla., 740; death, 1. Titusville, Pa., 9,046; no deaths. Tuscaloosa, Ala., 2,000; no deaths. Winchester, Va., 5,000; no deaths. Youngstown, Ohio, 15,421; deaths, 3; consumption 1. Total population, 229,116; number of deaths, 62; deaths under 5 years, 20; annual rate per 1,000, 14.1.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

NOTICE.—All official communications to the National Board of Health should be addressed to the *Secretary* of the Board, Dr. T. J. Turner, U. S. N. Correspondents and others whose writing may be for publication are reminded that much inconvenience is caused by writing on both sides of the paper.

NOTICE.—Extra copies of the BULLETIN will be furnished at this office at the rate of *five cents* per copy. Notice of at least one week should be given when a large number is required.

MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Canada	Kingston	15,000	June 4	3	10.2													62
Bermuda	Hamilton	14,867	June 7	3	10.5													76
Guadeloupe	Point-a-Pitre	22,219	May 14	12	27.3													
Mexico	Matamoras	16,000	May 29	10	32.6													
Do	....do	16,000	June 5	14	46.4													
Teneriffe	Santa Cruz	16,610	May 14	11	34.6					3		2						68.3
St. Helena	Jamestown	6,241	Apr. 30	4	33.4													81.2
Do	....do	6,241	May 7	2	16.8													82
Do	....do	6,241	May 14															80.6
Ireland	Queenstown	12,000	May 28	7	30.3								1				6	
Scotland	Leith	59,958	May 28	24	20.8												4	
Do	Dundee	140,000	May 21	49	16.5													49.1
England	Sheffield	284,403	May 28	123	22.5													63
Do	Liverpool	549,834	May 28	257	24.4					15		5	4	27	4	61	32	58
Do	Tunstall	29,673	May 28	9	15.7													64
Wales	Cardiff	83,389	May 28	30	18.7												4	57.8
France	Rouen	104,209	May 28	52	25.9													
Switzerland	Geneva	50,233	May 21	30	30.0												1	
Do	Zurich	25,329	May 21	6	12.5													
Holland	Amsterdam	316,952	May 21	158	26.0								1				4	56
Do	Rotterdam	152,515	May 21	67	22.8											24	1	
Germany	Berlin	1,123,571	May 14	477	22.1					19	3	6	4	10	1	98		48.0
Do	Barmen	95,000	May 21	32	17.5								1				2	37.2
Do	Bremen	112,200	May 14	63	29.3												17	
Do	Brunswick	75,000	May 21	35	24.6												3	37.5
Do	Cologne	144,750	May 21	73	26.8								2				8	
Do	Mannheim	53,500	May 28	20	19.5													64.3
Bavaria	Munich	230,000	May 21	173	39.1								2				14	
Saxony	Dresden	220,216	Jan. 22	102	24.1											12	12	45.1
Do	Leipsic	151,616	May 21	55	19.0													58.0
Belgium	Brussels	401,745	May 21	164	22.6						1		4				5	39.0
Italy	Rome	309,996	May 7	118	19.9						2		7				8	59.5
Do	....do	309,996	May 14	106	17.8						2		4				9	57.9
Do	Genoa	185,000	May 21	82	23.1													72.4
Do	....do	185,000	May 28	95	26.8													68.0
Do	Naples	462,519	Jan. 1	34	38.4								2				2	
Do	....do	462,519	Jan. 8	244	16.2						2		6				24	
Do	....do	462,519	Jan. 15	285	32.1								7				32	
Do	....do	462,519	Jan. 22	274	30.8						1		2				24	
Do	....do	462,519	Jan. 29	292	32.9								6				34	
Do	Leghorn	98,224	May 7	47	25.0								1					62.5
Do	....do	98,224	May 14	46	24.5								1					63.3
Do	....do	98,224	May 21	32	17.0													65.9
Austria	Vienna	730,911	May 21	478	29.1						24		1		1		17	60.9
Hungary	Buda-Pesth	370,037	May 15	277	39.0						11				9		5	
Russian Poland	Warsaw	379,763	May 14	146	20.0						2							75.6
Sweden	Stockholm	173,433	May 14	87	26.9												3	43.7
Spain	Cadiz	65,028	May 14	27	21.6													72.1
Barbary	Tripoli	20,000	May 21	7	18.3													73.7
Cape Colony	Cape Town	35,000	May 9	28	41.7													70
India	Calcutta	429,535	Apr. 30	263	31.9		68				6		12				3	87.3
Do	Bombay	644,500	Apr. 5	419	32.8													
Do	....do	644,500	Apr. 19	471	36.6		3											
Do	....do	644,000	Apr. 26	439	33.4		1											
Do	....do	644,500	May 3	463	35.4		5											
China	Shanghai	3,000	Apr. 12	1	17.3					8	1							54.2
Do	....do	3,000	Apr. 19	2	34.6					4	1							53.8
Do	....do	3,000	Apr. 26													35		58.2
Japan	Hiogo-Kobe	19,248	Apr. 16	12	32.5													
Do	....do	19,248	Apr. 23	7	19.0													
Do	....do	19,248	Apr. 30	8	21.7													
Do	....do	19,248	May 7	15	40.6													

National Board of Health

BULLETIN.

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CARBONIC OXIDE AS A SOURCE OF DANGER TO HEALTH IN APARTMENTS HEATED BY CAST-IRON FURNACES OR STOVES.

[By IRA REMSEN, Professor of Chemistry in the Johns Hopkins University.]

In 1865 a peculiar epidemic occurred in Savoy. It was a new thing, and consequently new theories were put forward to explain it. Among these, the one which attracted most attention was that of M. Carret, who, in a communication* read before the French Academy, attempted to show that the disease was due to the use of cast-iron stoves, from which in some way carbonic oxide was given off, thus contaminating the air.

General Morin then became interested in the subject and requested† Messrs. H. Sainte-Claire Deville and Troost to make a chemical examination of the air in immediate contact with a specially constructed cast-iron stove heated to redness, as he thought that Carret's statement might possibly be explained by supposing that carbonic oxide passes through the red-hot iron, as earlier experiments of Deville and Troost had shown that this is possible. The work undertaken by the last-named chemists led them to the belief that carbonic oxide may and does pass through cast iron heated to redness. As their experiments were the first undertaken to determine whether cast-iron stoves are objectionable or not, and as the names of the chemists have carried great weight in the discussion of the question, it is desirable to know here exactly what they did.‡

They first analyzed the air of a room heated by a cast-iron stove and found considerable quantities of carbonic oxide and of hydrogen. They then took the apparatus furnished by General Morin, consisting of a specially constructed cylindrical cast-iron stove, surrounded by an envelope of cast iron fitting into grooves in plates above and below the stove. The air was drawn out of the space between the stove and the envelope, and then passed over pumice-stone moistened with sulphuric acid and over caustic potassa. Thus freed from water and carbonic acid, it was passed into a combustion tube containing heated cupric oxide, the water and carbonic acid thus obtained weighed, and the weights of hydrogen and carbonic oxide deduced from those of the water and carbonic acid. The amounts found vary between 0.250 and 1.072 parts hydrogen, and between 0.141 and 1.32 parts carbonic oxide in 1,000 parts of air. These experiments have been justly criticised by others, and I only record the judgment of every thinking chemist when I say that the experiments do not furnish satisfactory proof of the presence of carbonic oxide in the air. In the first place, there is always present in the air a certain amount of organic matter of complex nature which by combustion will yield carbonic acid and water, and hydrocarbons which are, as is well known, formed in large quantity by the heating of coal might also be present in the space immediately surrounding the stove. These would also yield carbonic acid and water by combustion.

A little later the French Academy, impressed with the importance of the subject, appointed a committee, consisting of MM. Payen, Morin, Fremy, H. Sainte-Claire Deville, Boussy, and Claude Bernard, to make a thorough investigation. The committee began work in March, 1868, and continued until February, 1869, when General Morin, at the request and in the name of the other members, handed in an exhaustive report to the academy.§

The work reported upon comprised mainly:

1. Experiments on rabbits.

By a method suggested by Claude Bernard, but not described in the report, it was determined that the blood of rabbits kept for three days in rooms heated with cast-iron stoves contained carbonic oxide.

2. Direct analyses of the air of the examined rooms by the method of Deville and Troost.

3. Experiments with the above-mentioned stove used by Deville and Troost.

4. Collection of carbonic oxide itself by passing the air through a vessel containing a solution of cuprous chloride in hydrochloric acid. The gas thus collected was then set free and burned, when, from the characteristic color of the flame, the conclusion was drawn that the gas was in fact carbonic oxide.

As a result of the investigation, the conclusion was reached: That cast-iron stoves, as soon as their temperature reaches dark red heat, cause the escape of not inconsiderable quantities of carbonic oxide, a very poisonous gas.

It is not surprising that this opinion of a committee composed of such eminent scientific authorities produced a strong impression. The conclusion quoted has been pretty generally accepted as final, and cast-iron stoves have naturally come into disrepute. Hot-air furnaces made of cast iron have also suffered, and "furnace air" has often been used to signify air contaminated with carbonic oxide. The matter is evidently one of great importance from the standpoint of hygiene, and it is desirable here to inquire how far the report of the French commission can stand the test of unprejudiced criticism.

In the first place, the experiments with the rabbits, upon which so much stress is laid as proving the presence of carbonic oxide, are not fully described in the report, and, so far as I know, they have not been described since. It is impossible for this reason to determine to what extent these particular experiments may be relied upon as furnishing the evidence which they are supposed to furnish. There is only one good method known for the detection of carbonic oxide involving the use of animals, and this was introduced some years after the report under consideration was published. If the committee really used a reliable method it is strange that in the active discussion which has been carried on within the last three or four years with reference to the value of their report the details of the method have not been published. Under the circumstances it seems to be justifiable to disregard the indefinitely described experiments with rabbits.

As regards the direct analyses, the case is more difficult. The method used was the same as that of Deville and Troost, already referred to. The calculation of the results was, however, made in a different way. Instead of assuming that all the hydrogen of the water found was originally present as free hydrogen and all the carbon as carbonic oxide, the fairer assumption was made that some of the hydrogen, at least, was present as marsh gas. This would at once reduce the quantity of carbonic oxide found. The experiments show that carbonic oxide was present to the extent of 0.04 per cent., or 4 parts in 10,000, and that in some cases the amount was even greater.

It is plain from these experiments that, after the carbonic acid was removed from the air experimented on there were left other substances containing carbon and hydrogen; and inasmuch as the amount of hydrogen present is not sufficient to account for all the carbon, assuming the two elements to be united in the form of marsh gas, the conclusion is drawn that carbonic oxide must be present. But this conclusion is by no means certainly correct, and there are mainly three good reasons for doubting its correctness until further evidence is brought forward in its support. These are:

1. The fact that hydrocarbons other than marsh gas and containing a larger proportion of carbon not only may be present, but are just as likely to be present as marsh gas.

2. The fact that there are always present in the air organic substances of unknown composition which by combustion would increase the quantity of carbonic acid found. Erisman* found such substances in an unoccupied and unheated room by using the method of Deville and Troost, and Dupré and Hake† have very recently described some experiments undertaken for the purpose of determining the amount of organic matter in the air. The last-named chemists took extraordinary precautions to remove the carbonic acid and water from the air before it was heated with cupric oxide, and they distinctly state that these precautions are necessary. While not claiming any great degree of accuracy for the figures given by Dupré and Hake, they certainly do show that the organic matter in the air should be considered in such experiments as those under special scrutiny at present.

3. The fact pointed out by Dupré and Hake, and just referred to, that it is very difficult to remove all the carbonic acid from the air before it reaches the combustion tube. In experiments long continued and involving large volumes of air the error occasioned in this way might be comparatively large. Again, taking everything into consideration that bears upon these direct analyses, it will be seen that the evidence which they afford of the presence of carbonic oxide is far from conclusive.

Much weight cannot be attached to the experiment in which the carbonic oxide was collected and afterwards burned. The only evidence that the gas thus collected was really the oxide was obtained by burning a few cubic centimeters and taking the color of the flame as the test. It cannot be denied that other things may have been

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*Comptes rendus 66, p. 793.
†Comptes rendus 66, p. 82.
‡Comptes rendus 66, p. 83.
§Comptes rendus 68, p. 1006.

*Zeitschrift für Biologie, XII, 328.
†Jour. Chem. Society, 1881, 93.

present, and that the test was a very unsatisfactory one. These few critical remarks are intended to show that the subject under consideration cannot be regarded as exhausted, and that after the report of the French commission new evidence either for or against the correctness of the conclusion drawn was loudly called for.

A few years ago H. Vogel called attention to a very pretty and delicate method which he recommended as well adapted to the detection of small quantities of carbonic oxide. The method depends upon the action of the gas on blood, and consists in shaking with a little blood the air to be examined and then examining the blood with a spectroscope, the presence of carbonic oxide being revealed by a peculiar absorption spectrum which will be described below. Vogel claims that by this method 0.4 per cent. of the gas can be detected in the air. In a later article the same author describes some special experiments, undertaken at the request of the authorities of the city of Berlin, for the purpose of determining whether carbonic oxide was present in the air of certain school-houses in that city. Although Vogel succeeded in increasing the delicacy of his method, so that he could certainly detect 2.5 parts of the gas in 1,000 parts of air, he was unable to find any evidence of its presence in the buildings examined by him.

J. Gottschalk was also requested by the authorities of the city of Leipzig to examine the air of certain school-houses, and in 1877 his report was published in full, under the title: "Ueber die Nachweisbarkeit des Kohlenoxyds in sehr kleinen Mengen und einige Bemerkungen zu der sogenannten Luftheizungsfrage." (Leipzig, Barth.)

The method used by Gottschalk consisted in passing the air to be examined through a neutral solution of palladium chloride. When carbonic oxide passes through such a solution it exerts a reducing action; small, black flakes of the metal appear, and the presence or absence of the gas may be judged of by the presence or absence of the black flakes. It is undoubtedly true that carbonic oxide acts in the way described, and that very small quantities of it may be detected by means of the reaction mentioned; but it is also true that certain hydrocarbons which are likely to be in the air in the neighborhood of stoves and furnaces act in the same way. Hence, if the solution of palladium chloride were changed by the air, we should have evidence of the presence of either carbonic oxide or hydrocarbons, or, possibly, some of the easily oxidizable organic matters always present in the air. If, on the other hand, no change were produced, we might fairly conclude that carbonic oxide is not present, at least not in quantity greater than that which the method is known to be able to detect. According to Gottschalk, the method is competent to detect 0.22 parts in 1,000 of air, a fact which was established by a series of experiments undertaken specially for the purpose. In the air of the school-houses Gottschalk found no evidence of carbonic oxide, from which fact the conclusion may be drawn that the gas was not present to the extent of 0.22 parts in 1,000.

The negative results obtained by Vogel and Gottschalk have led to several examinations of a similar kind. In 1878 there appeared an article,* by S. Wolffhügel, in which some of the earlier experiments are subjected to criticism, and some new experiments are described. The article opens with a criticism of the results of R. Kaiser,† who found carbonic oxide in the air of the *Gewerbemuseum* at Nürnberg. The gas was detected by oxidizing with chromic acid solution, and also by absorption in a solution of cuprous chloride in hydrochloric acid. As Kaiser does not describe his experiments with sufficient accuracy to enable the reader to judge of their value, and there are so many precautions necessary in order to insure success, his results are entirely disregarded.

Aug. Vollert‡ has also stated that he had detected carbonic oxide in the air of the Johanneum at Hamburg; but the method used by him is the old one of Deville and Troost, and he entirely neglects the hydrocarbons, so that no weight can be attached to his results.

Wolffhügel's own experiments consisted in making a box on the side of a cast-iron stove so that one square decimeter of cast iron, that could easily be heated to redness, was covered by the box. The box ended in a tube by which connection was made with an aspirator. The air was then examined by means of Vogel's blood test. By means of this test he was able to detect carbonic oxide in tobacco smoke; but in all his experiments with the cast-iron stove the results were negative.

Several important details are lacking from Wolffhügel's description of his experiments. It is not stated, for example, what relation the piece of cast iron which was heated to redness bore to the heated coal within the stove, whether it was above the coal or the coal came in contact with it. The thickness of the plate of iron is also not mentioned.

Some experiments with cast-iron tubes were next tried. The walls of these tubes were 0.35^{cm} to 0.65^{cm} in thickness, and their internal diameter was from 2.5^{cm} to 5^{cm}. They were placed in blast-furnaces and heated to redness. The air drawn through them contained considerable quantities of carbonic oxide, which was easily detected.

Within a short time past several suggestions have been made looking towards the increased delicacy of the method for detecting carbonic oxide. Among these may be mentioned those of Th. Weyl and B. Anrep*, of C. H. Wolff† and S. v. Fodor‡. None of the suggestions appear to have been followed up very closely, and the papers in which they are described contain no satisfactory evidence in favor of the methods employed. There is one method, however, which deserves special attention as it has been tested very carefully by the inventor, and seems to be admirably adapted to the detection of very small quantities of carbonic oxide. This is the method described by W. Hempel.§ It consists of a modification of Vogel's blood test. By passing air to be examined through dilute blood, Vogel could detect 2.5 parts of the gas in 1,000 of air. Hempel concentrates the effect of the gas by allowing small animals (mice) to breath the air for a considerable period. He then kills the animals and examines the diluted blood with the spectroscope. By this means it was found that a much smaller amount of the gas can be detected than by the original Vogel method. The limit stated by Hempel is 0.5 parts in 1,000, or about one-fifth the limit given by Vogel. Hempel contented himself with proving the value of the method. He mentions no experiments involving the application of his method, nor has it, as far as I can learn, ever been practically used in investigating the question regarding the presence of carbonic oxide in the air of rooms.

In view of the uncertainty connected with the subject and its evident importance, it seemed to me to be desirable to undertake a new investigation, using that method which, after careful study and comparison, should prove best fitted for the purpose; and, at the request of the National Board of Health, I have for some time past been engaged upon the work, in the experimental part of which I have had the valuable assistance of Mr. D. T. Day.

The question which I proposed to answer as far as it lay in my power to do so was this: Is carbonic oxide a constituent of the air of rooms heated by cast-iron stoves and hot-air furnaces, particularly if these are of bad construction and in bad condition? There are plainly two sources of danger to keep in mind: 1st. The passage of carbonic oxide through cast-iron heated to a high temperature; and, 2d. The escape of the gas from fissures in the walls of the stove or furnace.

A careful study of the methods which have been used in all the earlier experiments led me to the belief that better results could probably be obtained by the use of Hempel's method than by any other, though, of course, much depends upon the accuracy of Hempel's statements. If the method is as delicate as is claimed, then it is better adapted to the purpose of such an investigation as this than any other which has ever been used. Accordingly, I first undertook an examination of the method itself, for the purpose of convincing myself of its value. I may say at once that my own experiments fully confirm the statement of Hempel concerning the delicacy of the method, and after an examination of other methods and a comparison of them with this one, I am fully convinced that it is the best one now at our command for the purpose for which it is intended. In order that the experiments described in this report may be intelligible to those who have not familiarized themselves with the method of Vogel already referred to, and of which that of Hempel is a modification, I give here a brief description of the method as used by myself.

THE VOGEL-HEMPEL METHOD OF TESTING FOR THE PRESENCE OF CARBONIC OXIDE.

The original method, as given by Vogel‖, is thus described: "If it is desired to test the air of any room with reference to the presence of carbonic oxide, it is best to empty in the room a flask of about 100$^{cm^3}$ capacity and filled with water. In the empty flask there are then poured 2–3$^{cm^3}$ of blood, so strongly diluted with water that it is only faintly colored red, but at the same time distinctly gives the two known absorption bands when examined in a small test-tube with the spectroscope. If this solution is shaken with the air only one minute, the action of carbonic oxide, if it is present, can be seen even in the change of color of the blood. It appears more of a rose color; the absorption bands are a little paler, less distinct, and moved a little farther to the left than those of pure blood. This change alone is sufficient to enable a skilled spectroscopist to detect the presence of carbonic oxide.

"Those who are less skilled may convince themselves, however, by the addition of 3–4 drops of strong ammonium sulphide, which, as is well known, causes the disappearance of the two bands of pure blood, and the appearance of a broad, indistinct shadow in their place, while the bands of the blood which contains carbonic oxide are not changed by ammonium sulphide."

The smallest quantity of the gas which Vogel could detect was 2.5 parts in 1,000. Hempel's modification of the test consists, as already mentioned, in allowing mice to breathe the air under examination, killing the mice and then proceeding with the blood as Vogel recommends. The mouse used is placed in an apparatus made of two glass funnels joined together at their mouths by means of a wide rubber band. The air is drawn through this apparatus by means of an aspirator, and at the end of the experiment the mouse is killed by the

* Zeitschrift für Biologie, 14, 506.
† Mittheilungen des bayer. Gewerbemuseums 1877, Bd. 1, 2.
‡ Ueber Luftwechsel und Beschaffenheit der Luft in den ventilirten Räumen des Johanneums. Hamburg, 1878, 22.

* Berichte der deutschen chemischen Gesellschaft, XIII, 1294.
† Correspondenzblatt des Vereines analytischer Chemiker, 1880, 46.
‡ Vierteljahrsschrift für öffentliche Gesundheitspflege, 1880, 377.
§ Zeitschrift für analytische Chemie, XVIII, 399.
‖ Berichte der deutschen chemischen Gesellschaft, X, 793, and XI, 225.

most convenient method. I have found it best to drop the animal into a tall and narrow cylinder, and to fill this completely with water, bringing down upon its mouth a glass plate. In a very short time death follows. The mouse is then brought into a small, clean beaker with a little water, and cut in two in the neighborhood of the heart by means of a pair of small, sharp scissors. On squeezing the pieces with a pestle enough dilute blood is easily extracted for the observations. If the mice have been used to examine the air of buildings situated away from the laboratory, the dilute blood, obtained as above described, is best brought into strong glass tubes, so as to completely fill them, and the tubes then tightly corked and taken to the laboratory for examination.

In order to thoroughly accustom ourselves to the use of the method, my assistant and myself made a series of observations, the results of some of which are here recorded.

1. Into a gasometer, the capacity of which is 16,750^{cm3}, and which was filled with air, there were introduced 83.75^{cm3} CO, so that the air contained 0.5 per cent. of the gas. The mixture was allowed to stand about 20 hours to secure thorough mixture of the gases; 10 liters of the mixture were now passed through the Hempel funnel, in which a mouse was placed. In five minutes the mouse appeared to show symptoms of poisoning, and in half an hour it could hardly move. The spectrum of CO was very distinct. The time occupied in the passage of the 10 liters of air was two hours.

2. In the same gasometer as that used in the first experiment, 33.52^{cm3} of CO were introduced with air, the mixture thus containing 0.2 per cent. CO. In other respects the two experiments were identical. The mouse was plainly affected. The blood spectrum gave unmistakable evidence of the presence of CO.

3. 10^{cm3} CO in gasometer mixture contained 0.06 per cent. CO. Time, 2½ hours. Volume of gas, 15 liters. CO spectrum easily recognized, particularly by comparing the blood with that of a mouse unaffected by the gas.

4. Air contained 0.05 per cent. CO. Time, 3 hours. Volume of gas, 14.5 liters. CO spectrum recognized.

5. Air contained 0.04 per cent. CO. Time, 2½ hours. Volume of gas, 14.5 liters. CO spectrum recognized, but weak.

While the experiments thus briefly described will serve to give an idea of the character of our preliminary work, it should be mentioned that each one of the experiments was repeated a number of times with the object of thoroughly accustoming our eyes to the characteristic features of the carbonic oxide spectrum. These repetitions were especially desirable in the last experiments involving the smallest quantities of the gas. At first we were unable to detect 0.05 per cent. with any degree of certainty, but after considerable practice with small quantities we had no difficulty in detecting 0.04 per cent. This is less than the lowest limit mentioned by Hempel, viz, 0.05 per cent., but there can be no doubt in regard to the accuracy of this statement. The experiments with 0.04 per cent. were frequently repeated, and we subjected ourselves to such conditions as to make self-deception impossible. Several specimens were prepared by my assistant, some of them being affected with carbonic oxide, and the rest not; without any knowledge in regard to the nature of the different specimens, they were examined by me, and, after the necessary practice, those which were contaminated with carbonic oxide were detected unerringly. The same process was then reversed. I prepared the specimens, and my assistant detected those which contained the carbonic oxide as readily as I had done. Having thus trained ourselves for the work with this method, and being thoroughly convinced that we can detect carbonic oxide in air when it is present to the extent of 0.04 per cent., or *four parts in ten thousand*, it remained to examine the other methods for which great delicacy has been claimed.

By agitating 10^{cm3} of blood from five to seven times, each time with about six liters of the air to be examined, heating the blood to 90–95°, and passing a current of air through it, and then through an aqueous solution of palladium chloride containing one part of the chloride to 50 of water, S. von Fodor* claims to be able to detect the presence of 0.5 part of carbonic oxide in 10,000 of air. By this method he claims to have detected carbonic oxide in the blood of rabbits which had been kept for some time in an atmosphere containing only 0.4 part of the gas in 10,000 of air. He also recommends the use of test papers prepared by moistening fine filter paper with a 0.2 per cent. solution of palladium chloride; and states that if the air contains $\frac{1}{2000}$ of carbonic oxide the paper becomes covered with a black film in a few minutes; if $\frac{1}{10000}$ the change is effected in 2 to 4 hours; if $\frac{1}{20000}$, in 12 to 24 hours.

The difficulty with this test has already been pointed out. Other substances besides carbonic oxide exert a reducing action on palladium chloride, and the separation of minute quantities of palladium can scarcely be regarded as furnishing very strong evidence of the presence of the gas. I have made a number of trials with this method of von Fodor, but I have not been able to get results as good as those described by him, nor as good as those which I could easily get by using Hempel's method. It may be that in my experiments some essential conditions were not fulfilled, but, at all events, the fact remains that, striving earnestly to give the method a fair trial, I could not finally accept it, and I certainly cannot indorse the statements of von Fodor concerning it.

The same writer claims, further, that the color reactions of blood containing carbonic oxide are better adapted to the detection of the gas than the spectroscope. He recommends that the blood be shaken with ammonium sulphide in a test tube, and then examined by transmitted light. If it contains carbonic oxide it appears red; if not, it is turned violet. This difference in color is said to be recognizable when the blood has stood in a flask of 10 liters' capacity in contact with air containing 0.05 per cent. carbonic oxide. I examined this method carefully, but soon became convinced that it possessed no advantages over the Hempel method, and the results seemed always to be less reliable. While I never failed to detect 0.04 per cent. of the gas by the latter method, 0.05 per cent. was the least that I could detect by means of the color reactions; and I found that the opinion of neither my assistant nor myself could be relied on when it was based solely on an examination by this latter method.

As a result of the work thus far described, then, it will be seen that there is a method the indications of which are unmistakable, and which renders it possible to detect the presence of 0.04 per cent. of carbonic oxide air.

Armed with this method, the next step in the investigation was, of course, to apply the method to the examination of the air of such buildings as seemed to be most suspicious. The indiscriminate examination of buildings without previous careful inquiry in regard to the condition and character of the heating apparatus used in them was not desirable. It seemed best to inquire first of those most likely to be informed in regard to the condition of furnaces in various public and private buildings in this city. Accordingly, a number of the city officials, including the health commissioner, fire commissioners, and others, and several of the leading manufacturers of furnaces and stoves, were visited, and asked for the desired information. My thanks are due to all these, who so readily responded to the questions asked. Much valuable information was gathered in this way. It is unnecessary to go into details in regard to the places which we selected for examination. Suffice it to say that from first to last the air in a comparatively large number of rooms was examined. Whenever a particularly bad furnace was heard of, mice were stationed in the immediate vicinity of the hot-air flues connecting with it. If any special complaint was heard regarding bad air supposed to be caused by a furnace or a stove, mice were put on the scent. It is believed that in some of the places examined there were as bad furnaces as could well be found anywhere. Not infrequently the disagreeble "close" character of the air was very striking. In short, it is believed that the examination was as thorough as it is possible to make it. The result of the examination is simply this, that *carbonic oxide was not detected in a single case, and the conclusion is justified that in rooms heated by cast-iron stoves and furnaces there is not present in the immediate vicinity of the hot-air flues as much as* 0.04 *per cent. of carbonic oxide.*

This result is in accordance with those reached by Vogel, by Gottschalk, and by Wolffhügel, referred to in the earlier part of the report, and cannot be disregarded in any future discussion of the question under consideration.

Another question remains to be answered, and that is, whether carbonic oxide in smaller quantities than those which can be detected by Hempel's method may not be present. There is not, however, any reliable method for detecting smaller quantities, so that the question is as yet unanswerable. It is also very difficult to decide whether such small quantities of the gas are injurious to health or not. I have not undertaken any experiments on this point. Those who have discussed it differ in their opinions.

H. Vogel thinks that any quantity of carbonic oxide which cannot be detected by his original method cannot be dangerous. He says: "When the air of a room, containing a very small quantity of carbonic oxide, has not the power to react on the very dilute blood used, this air also has no power to poison the much more concentrated blood of the human lungs. The large quantity of oxygen acts as a natural antidote, and I consider the presence of smaller quantities of carbonic oxide in the air than 2.5 parts per thousand as decidedly not injurious. Indeed, it is possible that the human organism may be able to endure even a larger quantity, for it is a fact that in tobacco-smoke, which is inhaled by millions, carbonic oxide can be easily detected by means of the blood-test, and, judging by the strength of the reaction, the gas is present in the smoke in larger quantity than 2.5 parts per thousand. It is probable that the harmfulness of small quantities of carbonic oxide has been overestimated."

Wolffhügel accepts Vogel's view, and suggests this guide for sanitarians, that as long as air does not contain enough carbonic oxide to be detected by Vogel's test (that is, 2.5 parts per 1,000), it may be regarded as uninjurious.

On the other hand, von Fodor takes quite a different view of the matter. According to his experiments, when air contains 4 parts of the gas in 1,000, rabbits become unconscious in it in four hours; if 3 parts are present the effect is reached in 24 hours, and even with 1.3 parts decided symptoms are produced when the air acts for several days on the organism. But man is more sensitive to the action of carbonic oxide than animals, as Friedberg has shown in his treatise, "Vergiftung durch Kohlendunst" (Berlin, 1866), and as follows from the fact that animals easily recover from unconsciousness, whereas

* Vierteljahresschrift für öffentliche Gesundheitspflege, and Dingler's Polytechnisches Journal, 1880, 377, CCXXXIX, 456.

human beings usually die if they once lose consciousness. . . . Further experiments with rabbits showed that even 0.5 parts per 1,000 of carbonic oxide causes difficulty in breathing; the animals staggered and took no food, and were sleepy when the quantity of the gas was reduced to 0.25 parts, so that in this dilution it must be regarded as injurious to health. The views of von Fodor may be summed up briefly, thus: As 1.5 parts of carbonic oxide per 1,000 of air are dangerous to health, 0.5 parts, when inhaled for considerable time, are injurious, and 0.04 parts are not without influence, it is desirable that the heating apparatus and gas pipes in public institutions and private dwellings should be examined with reference to the question whether they permit carbonic oxide to enter into the air used for breathing.

To decide between these widely differing opinions is not part of the work which I originally had in mind. It does not, indeed, belong to a chemist to deal with such matters. The only point I would make in this connection is that it is better to err on the safe side, if err we must. If carbonic oxide can be detected by any method in the smallest quantities in air to be used by human beings, measures should be taken to prevent its further presence.

The cases thus far experimented upon are such as were actually met with in occupied buildings. While the uniformly negative results made it appear probable that experiments with any specially constructed stoves would also yield negative results, I thought it desirable before closing the investigation to test the matter somewhat further. Through the kindness of Messrs. Hutchinson Brothers, manufacturers of furnaces in this city, I was furnished with a stove of peculiar construction for the purpose of further experiments.

Since the investigation of the French commission, in which a cast-iron stove was used, no experiments except those of Wolffhügel have been made on stoves specially constructed for the purpose of determining whether carbonic oxide passes through cast iron heated to redness or not. As the method of detection used by the French commission is not infallible, and as that used by Wolffhügel is not as delicate as the one used in this investigation, it was thought that possibly the use of the more delicate method might show that the gas really does pass through, as stated by the French commission, though denied by Wolffhügel. Two kinds of experiments were performed: 1st. Those in which the air examined was drawn from the top of the stove consisting of cast iron heated to redness: and 2d. Those in which the air was taken from a space on the side of the stove in direct contact with the hot coal.

The stove used is a simple cylinder of wrought iron about two feet high and one and a half feet in diameter. It is so arranged that it can be filled with coal, and the supply of air regulated with ease. The top is a piece of cast iron carefully fitted to the cylinder by an air-tight joint. At the side of the cylinder is a space about six inches square furnished with carefully made grooves, into which plates of cast iron of different thickness may be placed, and fitted in air tight, if necessary, with luting.

Experiment 1. The stove was heated to as high a temperature as possible, so that the top of cast iron was nearly all white hot. The temperature was kept about the same throughout the experiment, the dampers being closed the greater part of the time. A metallic funnel was brought down close to the hot plate; this was connected by rubber tubing with a glass U-tube placed in water for the purpose of cooling the air; then connection was made with the double funnel containing the mouse, and by means of an aspirator air was slowly drawn through the whole system. Twenty liters were drawn through in one and a quarter hours. The mouse was killed and the blood immediately examined, but the spectroscope failed to reveal the presence of any carbonic oxide.

Experiment 2. The same stove was used as in the last experiment, but a piece of cast iron $\frac{3}{8}$ inch in thickness was introduced so as to form part of the side of the stove. The coal in the stove was above the top of the cast-iron plate, and the plate was kept considerably above red heat during the experiment. The funnel was applied to this plate and the experiment was, in other respects, conducted the same as the last one. No evidence of the presence of carbonic oxide was obtained.

Experiment 3. Same as Experiment 2 except that the cast-iron plate used was thinner, being from $\frac{1}{4}$–$\frac{1}{3}$ of an inch thick. The space from which the air was drawn was white hot. No carbonic oxide found. Special precautions were taken to prevent the mouse from breathing fresh air in the brief interval from the time the passage of air was stopped until the mouse was killed, which was of course as soon as possible. On stopping the aspirator, both ends of the Hempel funnel were closed; one end was then connected with the hydrant and the air displaced by water.

Experiment 4. Same as Experiments 2 and 3. The plate in this case was $\frac{1}{16}$ of an inch in thickness. No carbonic oxide found.

All these experiments, then, it will be seen, give negative results, and show that under apparently the most favorable conditions not as much as 0.04 per cent. of carbonic oxide passes through heated cast iron.

In view of the accumulating mass of testimony, of which this report furnishes a part, against the correctness of the conclusion first authoritatively stated by the French commission, it appears to be highly desirable that the work of the commission should be repeated, account being taken of the influence of the possible sources of error to which attention was called in the first part of the report. The work would be tedious and would require the greatest possible care, but the importance of the question involved would justify the necessary expenditure of time. If this work were repeated it might be possible to discover what the real cause of the bad effects of furnace air is.

In conclusion, I will only say that, in view of the results reached in these experiments, and those of some earlier experimenters which have been referred to, the confident references to carbonic oxide as a source of danger to health in rooms heated by hot-air furnaces and cast-iron stoves, which we so frequently hear, certainly should be modified to accord with what is actually known. The hypothesis is perhaps justifiable that carbonic oxide is present in such rooms, but not that it is present in quantities as great as 0.04 per cent.; and it remains to be shown whether such minute quantities of the gas, if present, can act injuriously on the health of those who breathe it.

PROPOSED SANITARY LEGISLATION IN GEORGIA.

DEAR SIR: Your careful attention is requested to the subjoined bill and to the resolutions of the Medical Association of Georgia in relation thereto.

The enactment of similar laws in other States, and the practical absence of all regulation of the practice of medicine in this State, makes our cities and towns the common refuge for all kinds of irregular and unlawful practitioners and unprincipled and irresponsible pretenders.

The time has come when the people, as well as the medical profession, require protection, such protection as it is believed will be afforded by the passage of the proposed bill.

It is not the purpose of the bill to interfere with any person whomsoever now lawfully engaged in the practice of medicine within the State.

It merely proposes—

1st. To establish one central board that shall have the power to confer licenses and to determine the legality or illegality of all foreign diplomas.

2d. That all persons now practicing, or who may hereafter engage in the practice of medicine, shall register in the county clerk's office.

3d. That after the passage of the act no one shall commence the practice of medicine within this State without (1) either a license from the board, or (2) a diploma from a chartered college within the State, or (3) a diploma from a chartered college without this State and indorsed by the board as genuine and legally conferred.

It is believed that the bill is equitable and just in all of its provisions, and that it will prove of great and lasting benefit to the medical profession and to the State. You are, therefore, urgently solicited to use your personal influence with the representatives in the general assembly from your county in favor of its enactment.

It will be esteemed a special favor if you will communicate the result of your interviews with your representatives, and with the senator from your district, to either of the undersigned at the earliest practicable moment.

Yours, truly,

H. V. M. MILLER, Atlanta,
JOSEPH P. LOGAN, Atlanta,
W. H. HALL, Milledgeville,
ROBERT BATTEY, Rome,
JNO. THAD. JOHNSON, Atlanta,
E. L. CONNALLY, Atlanta,
JAMES B. BAIRD, Atlanta,
Committee.

JUNE, 1881.

The bill was presented at the recent meeting of the State Medical Association, in Thomasville, and, on motion, was referred to the undersigned committee for investigation and report. The following is the report of the committee, which was promptly adopted:

THOMASVILLE, GA., *April* 21, 1881.

To the Medical Association of Georgia:

GENTLEMEN: Your committee, after a careful scrutiny and analysis of the accompanying bill, heartily approve its provisions, with the amendments suggested thereto, and respectfully recommend the adoption of the following resolutions:

Resolved, That the Medical Association of Georgia emphatically indorse the above bill and earnestly request for it the support of the medical profession and the influence of every physician within this State to secure its enactment.

Resolved, That a committee of seven members of this association—five of whom shall reside in Atlanta—be appointed to superintend its passage through both houses of the general assembly.

W. H. HALL,
T. H. KENAN,
J. T. JOHNSON,
K. P. MOORE,
JAS. B. BAIRD,
Committee.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 11, 1881.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Me	Portland	33,810	17	26.2	33,480	330	17		26.4				4				1				4			
N. H	Concord	13,838	4	14.9	13,771	67	4		14.9								1							
Vt	Burlington	11,364	1	4.6	11,248	116	1		4.8															
Mass	Boston	362,535	139	20.0	356,535	6,000	139		20.5				59				3				34		7	
	Cambridge	52,740	12	11.8	51,222	1,518	12		12.2				5				1		1		2		2	
	Edgartown	1,301	1	40.1	1,238	63	1		42.1															
	New Bedford	26,875	12	23.3	25,349	1,526	12		24.6				3											
	Newburyport	13,537	7	27.0	13,469	68	7		27.0				1								1			
	Marblehead	7,467	5	34.9	7,451	16	5		34.9				2								1		1	
	Nantucket	3,726	1	13.8	3,657	69	1		13.9															
	Plymouth	7,094	1	7.4	6,930	164	1		7.6				1											
	Fall River	49,006	16	17.1	48,846	160	16		17.3				8				1				2		1	
	Lowell	59,485	21	18.4	59,307	178	21		18.6				5								8			
	Lawrence	39,178	7	9.3	39,026	152	7		9.4										1		1			
	Worcester	58,295	13	11.6	57,528	767							6				1				1			
	Brockton	13,608	4	15.3	13,569	39	4		15.3				3											
	Holyoke	21,851	9	21.4	21,822	29	9		21.4				5				3		1		2		1	
	Bridgewater	3,620	1	3.6	3,594	26	1		3.6															
	Milford	9,310	5	28.0	9,267	43	5		28.0				1								2			
	Chicopee	11,325	4	18.4	11,324	1	4		18.4								1				1			
	Fitchburg	12,405	2	8.4	12,368	37	2		8.4															
	Somerville	24,985	6	12.5	24,906	79	6		12.5				3											
	Springfield	33,340	10	15.7	32,592	748	10		16.0				1								2			
	Spencer	7,466	1	7.0	7,459	7	1		7.0				1											
	Quincy	10,529	2	9.9	10,438	91	2		9.9				1											
	Northampton	12,172	3	13.0	12,044	128	3		13.1				2											
	Haverhill	18,475	5	74.1	18,306	169	5		14.2										1		1			
	Gloucester	19,329	2	5.5	19,309	20	2		5.5				1											
	Chelsea	21,785	10	23.7	21,253	532	10		24.5				3								1		1	
	Clinton	8,030	3	19.6	8,019	11	3		19.6				1								1			
	Beverly	8,445	3	19.0	8,421	24	3		19.0				1								1			
	Malden	12,017	4	17.4	11,959	58	4		17.4				2								1			
	Salem	27,598	9	17.0	27,396	202	9		17.1				3								1			
	Taunton	21,213	8	19.4	21,102	111	8		19.5				1								1			
	Westboro'	5,214	1	10.0	5,178	36	1		10.0				1											
	Woburn	10,938	4	19.1	10,907	37	4		19.1				1								1			
	Lynn	38,284	17	23.2	37,730	554							4								4		1	
	Weymouth	10,571	2	9.9	10,521	50	2		9.9												1			
	Waltham	11,711	1	4.4	11,692	19			4.4												1			
	Webster	5,696	8	73.4	5,652	44	7	1	57.6				5						1					
	Westfield	7,587	2	13.6	7,525	62	2		13.7												1			
	Brookline	8,053	2	12.9	8,036	17	2		12.9															
R. I	Providence	104,855	32	15.9	101,209	3,646	32		16.5				7				1				8		1	
Conn	New Haven	62,882	26	21.6	60,654	2,228	25	1	21.5	23.0			8	1			1		3		5			
	New Britain	13,978	1	3.7	13,903	75	1		3.7												1			
	Waterbury	20,269	8	20.6	20,117	152	8		20.7				3								1			
	Fairfield	3,748			3,603	145																		
	Norwich	21,141	5	11.2	20,579	562	5		12.7				1											
N. Y	New York	1,206,577	633	27.3	1,186,144	20,433	620	13	27.2	33.0			252				30		13		100		11	
	Brooklyn	566,689	188	16.7	558,474	8,215	183	5	17.1	31.8			78	3			6				30		7	
	Yonkers	18,892	6	16.6	18,528	364	6		17.0												2		1	
	Poughkeepsie	20,207	6	15.5	19,513	694	6		16.4				1								2			
	Newburgh	18,050	5	14.5	17,480	570	5		14.9				2											
	Rochester	89,363	35	20.4	88,845	518	35		20.6				11				3				6			
	Watertown	10,697	1	4.9	10,589	108	1		5.0								1							
	Cambridge	1,850	1	29.1	1,800	50	1		29.2															
	Utica	33,913	7	10.8	33,669	244	7		10.9				2											
	Little Falls	6,910	2	15.1	6,836	74	2														1			
	Port Jervis	8,874	5	29.4																	1			
	Peekskill	7,009	1	7.4																				
N. J	Hudson Co	187,950	59	16.4	186,254	1,696							11				4				10		2	
	Newark	136,400	43	16.4	133,074	3,326	41	2	16.2	31.4			19				1				8			
	Orange	13,206	6	23.7	12,749	457	6		24.6				6								2			
	Camden	41,658	20	25.0	38,064	3,594	16	4	21.9	57.6											3	2		
	Plainfield	8,126	2	13.0	7,633	493	2		13.7				2											
	Asbury Park	1,640			1,584	56																		
Pa	Philadelphia	846,980	310	19.0	815,182	31,798	283	27	18.1	44.3			105				1		2		47	6	3	
	Pittsburgh	156,381	70	23.4	152,290	4,091	68	2	23.3	26.1			26	2			10		9		4			
	Erie	27,730	6	11.3	27,499	231	6		11.4												2			
	Reading	43,280	13	15.1	42,926	354	13		15.9				8								2			
Del	Wilmington	42,499	11	13.5	37,023	5,746	5	6	5.9	57.1			1	3					1		1			
D. C	Dist. of Col	180,000	74	21.4	120,000	60,000	39	35	16.9	30.3			8	12			2				12	11		
Va	Norfolk	21,966	11	26.1	11,933	10,033	4	7	17.7	35.9			1	2								3		
	Richmond	63,803	27	22.1	35,756	28,047	11	16	16.0	30.0			6	7								2		
	Lynchburg	15,959	9	29.4	7,484	8,475	2	7	13.9	44.2				5								2		
W. Va	Wheeling	31,266	6	9.8	30,551	715	6		10.2				1								1			
N. C	Wilmington	17,361	7	21.1	6,893	10,468	2	5	15.1	24.8				3										
S. C	Charleston	49,999	51	53.2	22,713	27,287	16	35	37.2	66.5			8	15							1	1	4	
Ga	Augusta	23,023	14	35.7	12,364	10,659	4	10	16.8	49.5			2	9								1		
	Atlanta	37,421	24	33.0	21,086	16,335	10	14	24.4	44.6			5	7			1						1	
	Savannah	30,681	33	56.1	15,007	15,674	7	26	24.3	73.5			3	13							1	7	1	
	Rome	3,877	6	70.4	2,154	1,723	3	3	73.5	90.6				1			1	2						
	Brunswick	2,891	4	62.0	1,445	1,446	1	3	36.9	110.7				2							1			
Fla	Jacksonville	8,000	3	19.6	5,000	3,000	1	2	10.4	34.4				1										
	Key West	9,890	7	36.9	6,746	3,144	5	2	38.7	23.0											2			
Ala	Mobile	31,205	19	31.8	16,837	14,368	14	5	43.2	18.2			7	4			1		1		1			
	Selma	7,529	10	69.6	3,345	4,184	5	5	76.2	63.9			5	2								2		
Miss	Columbus	5,230	3	28.0	2,760	2,470	1	2	18.8	22.2			1	2										
	Natchez	7,058	5	37.8	3,421	3,637	2	3	30.2	43.2			2											
	Vicksburg	11,814	5	22.1	5,975	5,839	3	2	26.9	27.0			1						1					
	Verona	1,000			650	350																		
La	New Orleans	216,140	170	39.2	159,128	57,231	119	51	40.9	45.7			31	29			3	9	1		7	2		
	Shreveport	11,017	7	33.2	3,739	7,276		7		50.6				5										
	Baton Rouge	7,217	5	36.3	2,917	4,300	2	3	35.8	37.0			1	3										
Tex	San Antonio	20,561	11	28.3	17,525	3,036	11		32.9				5				1				1			
	Austin	10,690	4	19.0	7,349	3,611	3	1	21.3	14.6			1	1							1			

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 11, 1881.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.															
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.		
		1										1																10		Portland	Me.
1																												2		Concord	N. H.
																												1		Burlington	Vt.
4		7				1				1		4								1		4						73		Boston	Mass.
		1										1																4		Cambridge	
																												1		Edgartown	
										1		1		2														8		New Bedford	
																												6		Newburyport	
		1										1																1		Marblehead	
																												1		Nantucket	
																												1		Plymouth	
				1						1		2		1														7		Fall River	
1										1		2																9		Lowell	
						1														1								3		Lawrence	
1		1																										9		Worcester	
		1								1		1																1		Brockton	
																1												1		Holyoke	
																												1		Bridgewater	
																												3		Milford	
																												2		Chicopee	
																												2		Fitchburg	
		1		1																								4		Somerville	
																												8		Springfield	
																												1		Spencer	
																1						1								Quincy	
				1								1																1		Northampton	
												2																1		Haverhill	
		1																										1		Gloucester	
		3										1		1														3		Chelsea	
1																												1		Clinton	
																												2		Beverly	
																										1		2		Malden	
												1																7		Salem	
																1												6		Taunton	
																												1		Westboro'	
		2		1																1								2		Woburn	
																												9		Lynn	
																										1				Weymouth	
																														Waltham	
		3		1						1																		2		Webster	
																												1		Westfield	
																												2		Brookline	
						2	1	1				2								3						1		12	1	Providence	R. I.
		1		1				1				2				1												10	1	New Haven	Conn.
																														New Britain	
		1																										6		Waterbury	
																														Fairfield	
																						1						4		Norwich	
54		39		1		4		8		32		33				20				24		6		15		2		241		New York	N. Y.
8		18	1			1		1		13		9	1			4				2		2		2		2		78	3	Brooklyn	
																						1						2		Yonkers	
												1																3		Poughkeepsie	
																												5		Newburgh	
		1						1				1				1												22		Rochester	
																														Watertown	
																												1		Cambridge	
										1		1																5		Utica	
																												1		Little Falls	
								1																				3		Port Jervis	
																												1		Peekskill	
1		6								2		3												2				29		Hudson Co.	N. J.
1		3						1		1		3				1		3				2		1				16	2	Newark	
												1																3		Orange	
						1				2	1													1				9	1	Camden	
1																												1		Plainfield	
																														Asbury Park	
	6	5		1		6				14		7		1	1	2		1		1				26	3		1	166	10	Philadelphia	Pa.
4		2	1	1		2				10		7		1										1		1		16	1	Pittsburgh	
						1																						3		Erie	
		1				1				1																1		7		Reading	
						1																		1	3			1	3	Wilmington	Del.
2	1		1		1	1		2				3		2								1				1		15	20	Dist. of Columbia	D. C.
1	1			1																								3	2	Norfolk	Va.
2	1																							1				9	12	Richmond	
	2																											2	3	Lynchburg	
1						2																						2		Wheeling	W. Va.
	1																					1						2	3	Wilmington	N. C.
5	8					1	3	2				1	1			1												6	17	Charleston	S. C.
2	3																											1	7	Augusta	Ga.
4	6						1														1							5	5	Atlanta	
	1				2			1					2														2	4	12	Savannah	
						1																						1	1	Rome	
	1																												2	Brunswick	
	1					1																							1	Jacksonville	Fla.
1												1																1	2	Key West	
5								1	1												1					1		4	2	Mobile	Ala.
2																				2			1			1	1	1	1	Selma	
1																										2				Columbus	Miss.
2																					1								2	Natchez	
								1																				1	2	Vicksburg	
																														Verona	
40	17	1				1	1	6	4			2	2			2	1											56	15	New Orleans	La.
	3								1		2																		1	Shreveport	
1	2																												1	Baton Rouge	
1																				2									5	San Antonio	Tex.
1	1											1																		Austin	

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 11, 1881—Continued.

States.	Cities.	Total population, according to the United States census of 1880.	Total number of deaths.	Representing an annual death-rate per 1,000 of—	Population, according to United States census of 1880.		Number of deaths.		Annual death-rate per 1,000.		Population under 5 years.		Number of deaths under 5 years.		Annual death-rate per 1,000.		Accidents.		Cerebro-spinal meningitis.		Consumption.		Croup.	
					W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Tex....	Waco	7,296	7	49.8	4,716	2,580	5	2	55.3	40.4	.....	.....	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Galveston	22,253	17	39.9	16,900	5,353	10	7	30.0	69.0	.....	.....	2	2	.....	.....	1	....	3	....	.....	3	.....	.....
	Marshall.....	5,622	1	9.3	2,836	2,786	1	.....	18.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dallas	10,358	7	35.2	.....	.....	6	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ark. ..	Little Rock...	13,185	10	39.6	8,636	4,549	7	3	42.7	44.2	.....	.....	1	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Tenn ..	Nashville	43,461	21	25.2	27,004	16,457	12	9	23.2	28.9	.....	.....	6	5	.....	.....	1	.....	.....	.....	2	.....	.....	.....
	Memphis	33,593	28	44.5	18,622	14,971	10	18	27.9	62.6	.....	.....	2	8	.....	.....	.....	1	1	.....	.....	1	.....	.....
	Clarksville ...	7,250	2	14.2	4,000	3,250	1	1	13.0	16.0	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Murfreesboro'	3,800	1	13.6	1,777	2,023	1	.....	29.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Trenton	1,400	1	37.2	828	555	.....	1	63.0	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ky	Louisville	123,645	48	20.3	102,842	20,920	32	16	16.2	39.8	.....	.....	11	7	.....	.....	2	.....	.....	.....	3	2	1	.....
	Bowling Green	5,111	3	30.6	3,254	1,857	1	2	16.0	56.0	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio ...	Cincinnati	255,708	92	18.8	247,538	8,170	86	6	18.1	38.9	.....	.....	32	.....	.....	.....	6	.....	2	.....	8	1	.....	.....
	Cleveland.....	160,140	50	16.3	158,094	2,048	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	4	.....	1	.....
	Gallipolis	4,400	1	11.8	3,474	926	.....	1	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Dayton	38,677	9	12.1	37,684	993	8	1	10.9	54.4	.....	.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....
	Portsmouth...	11,314	.....	.....	10,346	968	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ind	Indianapolis ..	75,074	21	14.6	68,558	6,516	20	1	15.3	8.2	.....	.....	8	.....	.....	.....	3	.....	.....	1	3	.....	.....	.....
	Evansville....	29,280	12	21.4	26,563	2,717	8	4	15.6	76.8	.....	.....	4	1	.....	.....	.....	.....	1	.....	4	1	.....	.....
	Richmond	12,743	2	8.2	12,106	637	2	.....	8.7	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ill	Chicago	503,304	197	20.5	496,620	6,684	.....	.....	.....	.....	.....	.....	99	.....	.....	.....	9	....	11	....	24	....	5	.....
	Peoria	29,315	7	12.5	28,821	494	7	.....	12.7	.....	.....	.....	1	.....	.....	.....	2	....	1	....	1	.....	.....	.....
	Aurora	11,825	3	13.2	11,612	213	3	.....	13.4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Elgin	8,789	1	6.0	8,647	142	1	.....	6.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	Moline.....	7,805	2	13.4	7,673	132	2	.....	13.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	....	1	.....	.....	.....
	Rock Island ..	11,660	5	21.8	11,473	187	5	.....	22.0	.....	.....	.....	.....	.....	.....	.....	1	....	.....	.....	.....	.....	.....	.....
	Lake	18,396	13	36.8	18,385	11	13	.....	36.8	.....	2,704	3	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Wis ..	Milwaukee ...	115,578	53	23.9	115,275	303	53	.....	58.7	.....	.....	.....	35	.....	.....	.....	.....	.....	6	.....	4	.....	.....	.....
	Beloit.....	4,790	1	10.8	4,696	94	1	.....	10.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minn ..	St. Paul.....	41,498	14	17.5	41,000	498	14	.....	17.7	.....	.....	.....	.....	.....	.....	.....	1	....	.....	.....	1	.....	.....	.....
	Minneapolis ..	46,887	24	26.7	.....	.....	.....	.....	.....	.....	.....	.....	11	.....	.....	.....	2	....	3	.....	1	.....	.....	.....
Mich ..	East Saginaw .	19,016	6	16.5	18,182	134	6	.....	16.5	.....	.....	.....	5	.....	.....	.....	1	....	.....	.....	.....	.....	.....	.....
	Port Huron...	9,000	4	24.8	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	....	.....	.....	2	.....	.....	.....
	Flint	8,410	3	18.6	8,163	247	3	.....	19.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa ..	Dubuque	22,254	5	11.8	22,106	148	5	.....	11.9	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Keokuk	12,117	.....	.....	11,066	1,051	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mo	Saint Louis...	350,522	158	23.5	328,232	22,290	135	23	21.4	54.6	.....	.....	59	7	.....	.....	9	....	6	1	13	9	.....	.....
	Kansas City ..	55,813	6	5.6	47,637	8,176	6	.....	6.5	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebr ..	Omaha.....	30,518	2	3.4	29,680	838	2	.....	3.6	.....	.....	.....	1	.....	.....	.....	1	....	1	.....	.....	.....	.....	.....
Kans ..	Lawrence.....	8,511	.....	.....	6,515	1,996	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colo ...	Boulder.....	3,069	.....	.....	3,024	45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah ..	Salt Lake City	20,768	10	25.1	20,591	177	10	.....	25.3	.....	.....	.....	5	.....	.....	.....	.....	....	.....	.....	2	.....	.....	.....
Cal	San Francisco.	233,956	87	19.4	210,515	23,441	72	15	17.8	33.9	.....	.....	30	.....	.....	.....	3	....	1	.....	10	.....	1	.....
	Vallejo	6,587	1	7.9	6,303	284	1	.....	8.3	.....	.....	.....	.....	.....	.....	.....	1	....	.....	.....	.....	.....	.....	.....
	Los Angeles ..	11,311	4	18.5	10,498	813	4	.....	19.9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
		8,139,169	3,341	21.4	.....	.....	.....	.....	.....	.....	.....	.....	1,102	171	.....	.....	126	12	74	3	429	60	49	.....

ABSTRACTS FROM CONSULAR REPORTS.

JAPAN.—United States Consul, T. B. Van Buren, under date of May 25, forwards a report of deaths at Yokohama during the month of April. Among the natives there were 115 deaths, of which one was from typhoid fever. The cases noted were, 5 of typhoid fever and 3 of typhus fever. Among foreigners there had been one case of typhus fever, and two deaths occurred from causes not given.

BARBADOES, WEST INDIES.—Under date of May 31, United States Consul W. H. Polleys forwards a circular issued by the Hon. William Robinson, governor of the island, May 27.

In this circular he states that several cases of yellow fever and one death had occurred in Bridgetown during the month of May. The board of health advise that bills of health should have on them a memorandum to that effect, and this recommendation was approved. The fever is not regarded as epidemic, and the island is free from other infectious diseases.

PORTO RICO, WEST INDIES.—United States Consul E. Conroy reports 5 cases and three deaths from yellow fever at San Juan during the month of April. Of small-pox, 42 cases are reported with 22 deaths. The total number of deaths was 106; population, 23,240; annual death-rate 55.5 per 1,000.

CHEMICAL EXAMINATION OF DRINKING WATER.

[REQUEST FOR SPECIMENS OF SUSPECTED WATER.]

A careful study of the chief methods in use for the chemical examination of potable water, so far as organic matter is concerned, has been undertaken by order of the National Board of Health. It is particularly requested of the correspondents of the board, of medical men throughout the country, and of others interested in sanitary science, that *any well-marked case of disease* which may seem on medical grounds fairly attributable to organic impurities in drinking water be promptly reported to Dr. J. W. Mallet, University of Virginia Post-office, Albemarle County, Virginia, with a few lines stating clearly the medical nature of the case, and the character of the evidence on which the water in question is suspected of having actually caused disease in persons who have used it.

It is further desired that a sample of each such water be forwarded for examination, *but not until notice has been received from Dr. Mallet that the analysts are ready to proceed with it*, since it is important that no useless delay should occur between the shipping of the sample and its investigation in the laboratory. In notifying any one who may be able to furnish specimens of suspected waters that may be forwarded, clear instructions will be sent as to the quantity of water required, and the mode of collecting, packing, and shipping it.

It is particularly desired that no case be presented on doubtful or vague evidence, since one important object of the inquiry demands that all such be rejected, and only those cases examined which involve the strongest grounds for believing that mischief has really been caused by organically foul drinking water.

The cost of packages and transportation for samples will be borne by the Board of Health.

NOTICE.—In filling the reports on the postal cards for cities and hospitals, the figures are frequently so placed between the lines as to leave the disease intended entirely uncertain, except in cases where the judgment of the compiler may enable him to determine which is meant. This may be avoided by a stroke of the pen after the disease to be recorded. The *total* numbers should be placed in their proper columns, and no figures placed immediately after the word *total* will be noted in the tables. Those who report *still-births* will please note them separately, as they are not included in the tables of mortality in the BULLETIN.

REPORT OF MORTALITY IN CITIES OF THE UNITED STATES FOR THE WEEK ENDING JUNE 11, 1881—Continued.

Diarrhœal diseases.		Diphtheria.		Erysipelas.		FEVER.						ACUTE LUNG DISEASES.								Measles.		Puerperal diseases.		Small-pox.		Whooping-cough.		Other diseases.		Cities.	States.
						Typhoid.		Malarial.		Scarlet.		Pneumonia.		Congestion of lungs.		Bronchitis, acute.		Pleurisy.													
W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	
....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	....	....	....	....	....	....	....	1	.....	Waco	Tex.
....	1	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	5	1	Galveston	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	Marshall	
3	..	....	....	..	....	....	....	....	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	1	....	3	.....	Dallas	
1	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	2	Little Rock	Ark.
1	1	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	6	7	Nashville	Tenn.
2	1	1	2	....	....	1	....	1	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	3	12	Memphis	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	Clarksville	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	Murfreesboro'	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	Trenton	
....	....	....	....	....	....	1	2	....	1	2	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	23	10	Louisville	Ky.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	Bowling Green	
8	....	1	....	....	....	3	1	....	....	....	....	2	1	..	....	2	1	....	....	2	....	1	....	....	....	1	....	50	2	Cincinnati	Ohio.
3	....	1	....	....	....	1	....	....	....	4	....	....	....	3	....	1	....	....	....	5	....	....	....	....	....	....	....	25	.....	Cleveland	
....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	Gallipolis	
....	....	....	....	1	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	....	Dayton	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Portsmouth	
1	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	11	....	Indianapolis	Ind.
....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	1	1	Evansville	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	.....	Richmond	
11	....	17	....	....	....	4	....	1	....	5	....	10	....	1	....	7	....	....	....	....	....	1	....	4	....	4	....	83	.....	Chicago	Ill.
....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	.....	Peoria	
1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	.....	....	Aurora	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	Elgin	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	Moline	
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The following reports for the week ending June 11, 1881, are from places where burial permits are not required:

Allegheny, Pa., 79,000; deaths, 29; under 5 years, 13; accidents 3, cerebro-spinal meningitis 2, consumption, 6, diphtheria 1, scarlet fever 1, congestion of lungs 1, measles 1, puerperal 2. Bath, Me., 8,000; deaths, 3; under 5 years, 1; pneumonia 1, measles 1. Belfast, Me., 5,508; deaths, 3; consumption 3. Brattleboro, Vt., 6,000; death, 1; under 5 years, 1; congestion of lungs 1. Bucyrus, Ohio, 3,950; deaths, 2. Calais, Me., 6,172; death, 1. Carrollton, Miss., 600; no deaths. Clinton, Mich., 1,200; no deaths. Corinth, Miss., 2,264; no deaths. Columbus, Ga., 10,123; deaths, 2; under 5 years, 1; diarrhœa 1. Crystal Springs, Miss., 955; death, 1; cholera-morbus 1. Decatur, Miss., 1,000; no deaths. Fayette, Miss., 400; no deaths. Greenville, S. C., 6,500; deaths, 3; under 5 years, 2; diarrhœa 2. Gunn City, Mo., 150; no deaths. Helena, Mont., 3,630; no deaths. Hernando, Miss., 1,000; deaths, 3; accident 1, consumption 1, bronchitis 1. Huntingdon, Tenn., 1,200; no deaths. Huntingdon, Pa., 4,500; deaths, 2; cerebro-spinal meningitis 1. Indianola, Tex., 900; no deaths. Iuka, Miss., 816; no deaths. Jefferson, Tex., 3,250; deaths, 3; under 5 years, 1. La Salle, Ill., 8,885; deaths, 4; under 5 years, 1; consumption 1, puerperal 1, whooping-cough 1. Louisiana, Mo., 5,000; deaths, 2; under 5 years, 1; typhoid fever 1, pneumonia 1. Madison, Ind., 9,009; deaths, 4; under 5 years, 1; measles 1. Meridian, Miss., 4,013; deaths, 2; under 5 years, 1; typhoid fever 1. Milan, Tenn., 1,800; death, 1; diarrhœa 1. Milford, Mich., 1,400; deaths, 2; under 5 years, 1; malarial fever 1. Milledgeville, Ga., 3,000; death 1; under 5 years, 1; diarrhœa 1. Muscatine, Iowa., 8,412; deaths, 2; under 5 years, 1; scarlet fever 2. Muskegon, Mich., 11,300; deaths, 2; under 5 years, 1; accident 1, measles 1. Painesville, Ohio, 5,504; death, 1; consumption 1. Pass Christian, Miss., 3,500; deaths, 2; under 5 years, 2; enteritis 2. Pearlington, Miss., 1,200; no deaths. Pleasant Hill, Miss., 253; no deaths. Port Royal, S. C., 750; no deaths. Raymond, Miss., 500; no deaths. Rensselaer, Ind., 900; death, 1; consumption 1. Santa Cruz, Cal., 5,000; death, 1; consumption 1. Senatobia, Miss., 935; death, 1; accident 1. Tampa, Fla., 740; no deaths. Titusville, Pa., 9,046; deaths, 2; under 5 years, 1. Tuskaloosa, Ala., 2,000; death, 1; bronchitis 1. Winchester, Va., 5,000; deaths, 6; scarlet fever 3; puerperal 1. Youngstown, Ohio, 15,421; deaths, 4; under 5 years, 2; consumption 1, pneumonia 1, congestion of lungs 1. Total population, 250,486; deaths under 5 years, 31; total number of deaths, 91; annual rate per 1,000, 18.9.

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MORTALITY IN FOREIGN CITIES, COMPILED FROM WEEKLY CONSULAR REPORTS TO NATIONAL BOARD OF HEALTH.

Countries.	Places.	Population.	Week ending—	Total deaths.	Annual rate per 1,000.	Cholera.		Yellow fever.		Small-pox.		Typhoid fever.		Typhus fever.		Other contagious diseases.		Weekly mean thermometer.
						Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
			1881.															
Vancouver's Island	Victoria	4,500	June 4	2	23.2													
Canada	Kingston	15,000	June 11	2	6.5													
Do	Montreal	135,000	June 4	62	24.0								1				6	60.1
Bermuda	Hamilton	14,867	June 14	3	10.5													
Cuba	Havana	195,437	June 4	142	37.9				2		24		4					83
Hayti	Port-au-Prince	30,000	May 25	17	29.6													80
Do	do	30,000	June 1	15	26.1													80
Do	Aux Cayes	9,000	May 21	6	34.8													80
Do	do	9,000	May 28	8	46.4													80
Guadeloupe	Point-a-Pitre	22,919	May 21	9	20.5		5											
Aspinwall	Colon	3,000	June 4	6	103.3						1							86
Do	do	3,000	June 11	2	34.5													86
Mexico	Matamoros	16,000	June 12	3	9.7													
Brazil	Rio de Janeiro	330,000	May 14	201	31.8				7				2		1		11	
Do	do	330,000	May 21	196	31.0				5								3	
Ireland	Queenstown	12,000	June 4	4	17.4													
Scotland	Dundee	140,000	May 28	33	11.1													55.1
Do	Leith	59,958	June 4	30	26.0													59.6
England	London	3,814,571	May 28	1,452	19.8						92		14				156	59.5
Do	Bradford	197,196	May 28	65	18.5												5	
Wales	Cardiff	83,389	June 4	30	18.7												1	61.3
France	Paris	1,988,806	May 28	1,006	23.1						21		39				92	
Do	Lyons	342,815	May 14	168	25.5						10		3				7	
Do	do	342,815	May 21	194	29.5						7		3				13	
Do	Havre	92,068	May 21	65	36.8						7							56.4
Do	Paris	1,988,806	June 2	1,228	32.1						21		38				136	
Do	Rouen	104,209	June 4	80	39.8													
Switzerland	Geneva	50,233	May 28	11	11.5												2	
Holland	Amsterdam	316,952	May 28	201	33.1								2		1		9	63
Do	Rotterdam	152,515	June 4	57	19.1													
Germany	Berlin	1,123,571	May 21	535	25.7					12	2	12	3	2	2	121	89	60.6
Do	Breslau	273,000	May 21	187	35.7								1				25	61.3
Do	Bremen	112,200	May 21	64	29.8										10		1	
Do	Barmen	95,000	May 28	44	24.6												2	65.5
Do	Brunswick	75,000	May 28	31	21.8								1				2	60.0
Do	Cologne	144,750	May 28	65	16.9												9	
Do	Mannheim	53,500	June 5	24	23.4													68.6
Würtemberg	Stuttgart	117,021	May 28	16	7.1													63.5
Bavaria	Munich	230,000	May 28	146	33.1						1						12	
Saxony	Dresden	220,216	May 21	111	26.2											11	11	57.4
Do	do	220,216	May 28	82	19.4													58.3
Do	Leipsic	151,616	May 28	78	26.7								1				6	56.6
Do	Chemnitz	95,135	May 21	57	31.3												4	72
Belgium	Antwerp	178,932	May 21	85	24.7					9	5	10	4				1	
Do	do	178,932	May 28	71	20.7					9	4	9	1			1	2	
Do	Brussels	401,745	May 28	174	22.5												8	63.3
Denmark	Copenhagen	235,254	May 17	132	29.3					1		5				17		50.1
Austria	Vienna	730,911	May 28	506	36.0						14		1		3		26	
Bohemia	Prague	260,805	Apr. 23	154	30.8						2						12	42.9
Do	do	260,805	Apr. 30	188	37.6												11	43.1
Roumania	Bucharest	177,646	May 21	87	25.6						2		3				6	
Do	do	177,646	May 28	84	24.7						1		2					
Hungary	Buda-Pesth	370,037	May 22	289	26.6						8				11		6	
Russian Poland	Warsaw	379,763	May 21	164	22.5						1							71.3
Russia	St. Petersburg	680,000	May 21	788	60.4												34	
Do	do	680,000	May 28	791	60.6												34	
Sweden	Stockholm	173,433	May 21	74	21.2								1				4	46.7
Norway	Christiania	120,000	May 21	49	21.2							1				12	1	43.1
Spain	Seville	138,000	May 22	72	27.2						3				3		17	77.2
Do	do	138,000	May 29	71	26.8						3				2		15	77.0
Do	Malaga	115,862	May 22	77	34.7						1							73.3
Africa	Algiers	68,055	Apr. 10	61	46.6							2	2				1	
Do	do	68,055	Apr. 17	65	49.6							2	2				8	
Do	do	68,055	Apr. 24	54	41.2												5	
Do	do	68,055	May 1	42	32.1	1	1											75.8
Barbary	Tripoli	20,000	May 28	12	31.3													70
Cape Colony	Cape Town	35,000	May 16	34	50.6													
Egypt	Alexandria	220,000	May 21	147	34.4													
British India	Calcutta	429,535	May 7	245	29.7		49				1		11				4	84.4
China	Shanghai	3,000	May 3	2	34.6					1								67.6
Do	do	3,000	May 10	1	17.3													61.2
Do	do	3,000	May 17							1		1						
Japan	Hiogo-Kobe	19,248	May 14	14	40.0													

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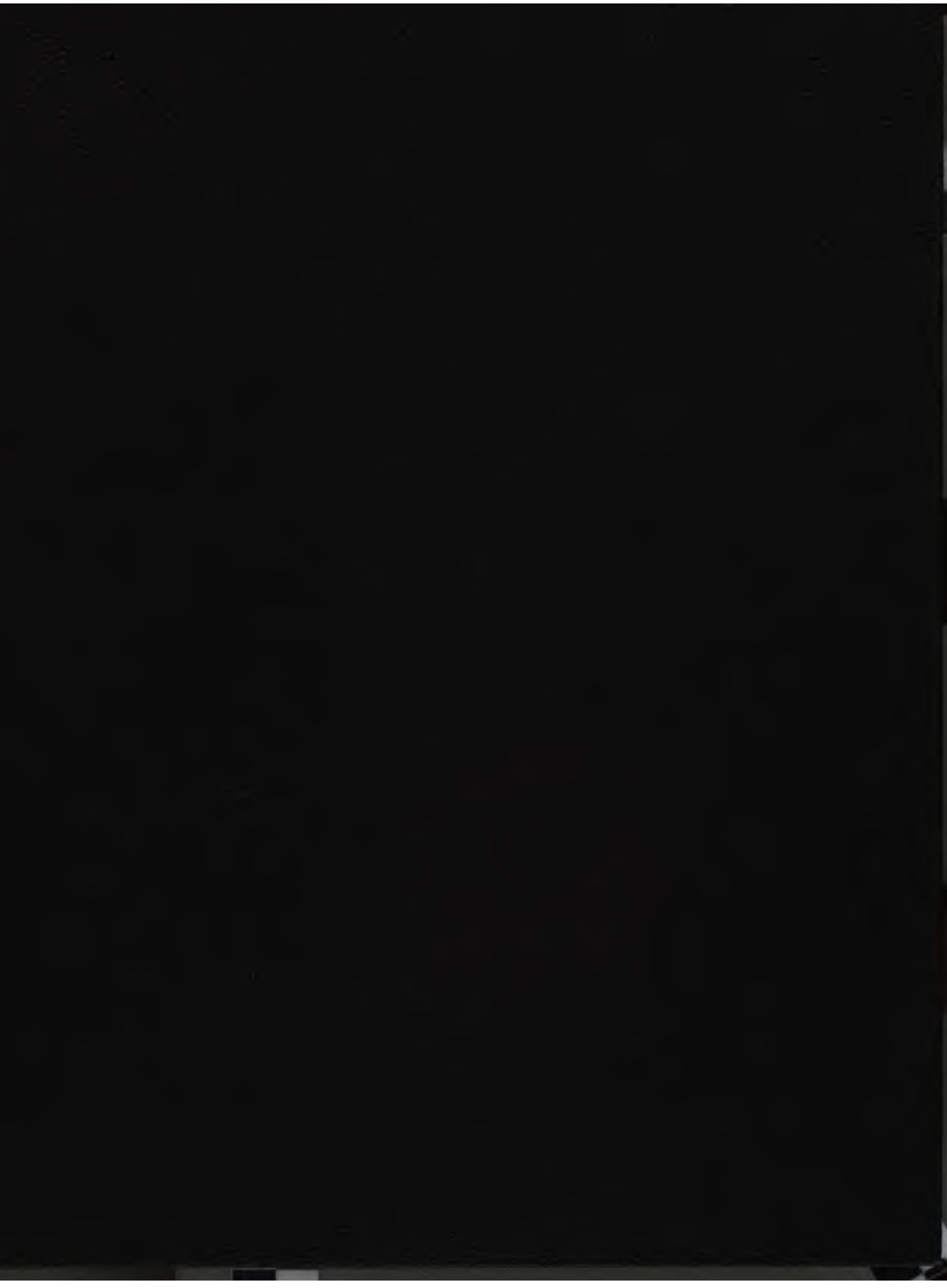
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